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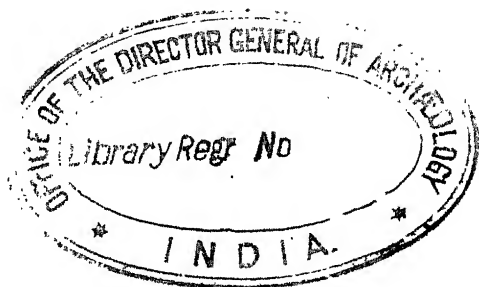
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THE
NUMISMATIC CHRONICLE,
AND
JOURNAL OF THE NUMISMATIC SOCIETY.





THE
NUMISMATIC CHRONICLE,
 AND
JOURNAL
 OF THE
NUMISMATIC SOCIETY.

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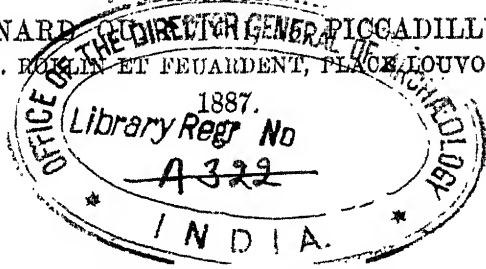


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NUMISMATIC CHRONICLE.

I.

THE ELECTRUM COINAGE OF CYZICUS.

It is not my intention in this account of the electrum coinage of Cyzicus to enter upon a history of the state in any of its relations, except so far as it may afford an elucidation of my more immediate subject. The purpose of the essay is to bring together as complete a list as is possible of all the electrum coins issued by Cyzicus during the long period of their emission, together with a reproduction by the autotype process of each type. It is hoped that this in itself will be of service to numismatists and others interested in Hellenic art and its development.

No attempt to publish a full list of these numerous coins has hitherto been made since the time of Sestini, whose catalogue, on account of the scarcity of types then known, was necessarily a very imperfect one. I have long felt that until a detailed, and to a very large extent an exhaustive account was given, it was impossible that this most valuable and extensive series of coin-types could be presented to numismatic science with any prospect of being adequately studied. In the hope, therefore, that I may be able to supply these important materials for study and research to those desirous of becoming acquainted with the marvellous series of the Cyzicenes, I have prepared this account of them, the result of much labour, but not undertaken without quite corresponding

pleasure. The work lays claim to be little more than an accurate catalogue, though I have also sought to make it useful to those not deeply acquainted with Hellenic mythology and its various cults, by some illustrative matter in connection with the different types.

Of this remarkable and large series of coins, Eckhel, as I shall have occasion to mention again, knew nothing. The first account of them was given by Sestini in his *Stateri antichi*, published in 1817, where figures of several staters and parts of the stater are given, not, however, very correctly. The next account is one by M. Charles Lenormant, *Essai sur les Statères de Cyzique*, in the first volume of the new series of the *Revue Numismatique*, in 1856, followed in 1864 by a paper by his son M. François Lenormant, *Statères inédits de Cyzique*, in the ninth volume of that periodical. The same learned author has also given an account of the coins of Cyzicus in *Dictionnaire des Antiquités* of Daremberg and Saglio. Though I am unable to agree with these eminent authors in some of their views, I feel myself under great obligations to them for much information and many suggestions. Two most valuable papers by Mr. B. V. Head have appeared in the *Numismatic Chronicle*, new series, vols. xvi. and xvii., "On a recent find of Staters of Cyzicus," and "Additional Notes," &c., the latter being accompanied by a letter from M. Six containing many valuable remarks on some of the staters described in Mr. Head's first paper. Several scattered notices of one or more of these coins have been given by De Koehne, Mr. Borrell, Dr. Imhoof-Blumer, and Herr Löbbecke in various serials.

It remains to mention Marquardt's very complete work, *Cyzicus und sein Gebiet*, published in 1836. Though a small space only is devoted to the electrum coinage—indeed at

the time he wrote not many staters, &c., were known—on all other subjects connected with the state he gives a very full account, and I am indebted to him for much of the material I have used in this essay.

The pleasing task is left me of expressing my deep obligation to the keepers of the various public collections noticed in the following account of the different coins, and to the private collectors who have most freely placed their coins at my disposal for publication. To Mr. Poole and the other officers of the Medal Room in the British Museum it is impossible for me to fully express my gratitude, for the courteous and untiring way in which they have received me in my numerous visits to that splendid collection, and for most valuable information and counsel.

The position of Cyzicus was one admirably fitted for the site of a great trading community. It shows us how the genius of the Hellenic race instinctively selected places suitable for colonization, and which afforded scope for the development of that spirit of commercial enterprise, which, existing at the time of our earliest acquaintance with that people, has continued with many vicissitudes to our own day. The town was placed on the neck of a promontory which projected into the Propontis (Sea of Marmora), on the northern coast of Mysia, about the middle of the waterway between the Ægean and Euxine Seas, and had therefore the advantage not only of the local trade with the opposite coast of Thrace, but of the wider traffic with the various towns on the shores of the two important seas between which it was planted.

The oldest settlers in Cyzicus are stated to have been Doliones, who were seated on the skirts of the Mysian

Olympus and around the shores of Lake Ascanius. This people had probably relations with the Hellenic stock, but had affinity also with the Phrygians. They in this way became influenced by the religious culture and civilisation of the more eastern branches of the great Hellenic family, which extended itself through Thrace to Hellas proper and to countries still farther to the west. Mysians, we are told, were settled in the plain of the river *Æsepus*, a kindred people, differing little either in habits or language from the earlier occupants. To these were added Phrygians from Thrace, and the whole population became so intermixed and fused that neither the autochthons nor the later immigrants can be separated the one from the other. It is due, probably, to there not having been any very distinctive difference between the several elements of the population that the inhabitants became one, and to some extent a homogeneous people. The next occupation was by Pelasgi from Thessaly, driven out thence by the *Æolians*, and who at a still earlier period had been dispossessed of *Magnesia* by *Cretheus*, son of *Æolus*. According to *Conon*, the author of the *Διηγόσεις*, their leader was *Cyzicus*, son of *Apollo*, or, as was otherwise said, of *Æneus* and *Ænete*, daughter of a Thracian king, *Eusorus*. *Cyzicus* was married to *Cleite*, daughter of *Merops*, king of *Percote*; but according to another account he died unmarried, though about to take to wife *Larissa*, daughter of the Thessalian *Piasus*. These genealogical stories appear to corroborate the Thessalian origin of the Pelasgi who occupied *Cyzicus*. *Conon* further relates that *Cyzicus* had no successor, and that the *Tyrrheni* (Pelasgi) took possession of the *Cyzicene Chersonnese*, subjugating the earlier Thessalians. Still among the mist of mythical events we next come across

the Argonauts on their way to Colchis. On landing at Cyzicus they were kindly received by the inhabitants, but after leaving and being driven back on the coast during the night, they were mistaken for enemies, and in the ensuing fight Cyzicus was slain by Jason or Heracles. His death was mourned by the Argonauts as well as by his own people, and his wife Cleite killed herself for grief, the tears of the nymphs originating a fountain which in her memory was called Cleite. During the stay of the Argonauts Hera instigated the giants, who dwelt on Mount Dindymus close by Cyzicus, to destroy Heracles. When Jason and the Argonauts were reconnoitring on the mountain, Briareus and his brother giants threw rocks down upon Heracles, who was left in charge of the ships, and endeavoured to close the mouth of the river Rhyndacus. The rocks were changed by Persephone into an island called Besbicus, and the giants were slain by the arrows of Heracles and his companions. Before leaving the place the Argonauts besought Dindymene for a favourable voyage, and are reported to have erected a temple to Rhea-Cybele, which existed there in after years, together with an image of the goddess, made of the wood of the vine, and like the Artemis at Ephesus and Dionysus of Naxos, no doubt a primitive agalma. As might be looked for, some of the coin-types have reference to Jason and other heroes of the Argonautic myth.

Passing onwards to later times, we arrive at what may be considered the historical origin of the city, in the advent of a colony from Miletus, actuated, it is said, by an oracle from Apollo. This apparently took place, though different dates are given, in Ol. vi. 1, B.C. 756. According to an inscription of Roman times, four of the six tribes into which the Cyzicenes were divided were of

Athenian origin, coming from the Asiatic settlement of Miletus.¹ Another colony is said to have come from Megara, about a century later, in B.C. 675. From this time until the extension of the Lydian kingdom under Gyges, nothing appears to be known of Cyzicus. It came to some extent under the Lydian power when that was carried up to the Hellespont, including the whole of the north of Mysia and almost all the coast from Adramyteum to the Rhyndacus. Though it may be disputed to what extent the Lydian king exercised authority in the time of Gyges, it is clear that Cræsus, by his first invasion of Ionia, made all the Greeks tributary. On the overthrow of the Lydian empire by Cyrus in B.C. 546, and the succeeding conquest of Miletus and other Greek cities in Asia Minor, Cyzicus became subject to Persian rule, and remained in that condition until B.C. 477, when the supremacy of that empire over the Hellenic cities of Asia Minor was overthrown. Cyzicus then came, more or less, under Athenian hegemony. It revolted before the battle of Cynossema, B.C. 411, but was, after the defeat of the Spartans there, again brought under the influence of Athens, whose power was farther strengthened by the total defeat at Cyzicus of the Spartan fleet under Mindarus, who fell in the battle, by Alcibiades and the Athenians, B.C. 410. The rule of Athens continued up to B.C. 405, when, at Ægospotami, Lysander, the Spartan commander, destroyed the Athenian fleet, and for the time broke up the thalassocracy of Athens. Sparta then became predominant, and remained so until B.C. 394, when Conon and Pharnabazus defeated Peisander, and slew him in the battle off Cnidus. Freedom was then restored to the

¹ Caylus, tom. ii., Pl. 60—62.

various Greek towns of Asia which had been under Spartan authority, and this they retained up to B.C. 387, when, by the provisions of the peace negotiated by Antalcidas, they again submitted to Persia. In this condition Cyzicus remained till, in B.C. 364, it once more came under Athenian hegemony, to be under her rule but a short time, for after the defeat of Athens at Chios, B.C. 357, the Asiatic towns regained their freedom. From this time until B.C. 334, when Alexander conquered Asia Minor, Cyzicus was a free and very flourishing state. It is unnecessary to carry farther the history, for the issue of the electrum coins, with which alone this essay is concerned, had certainly ceased before then.

The inner polity of an Hellenic state cannot be disconnected from the religion professed within it. The state was supposed to have its origin in some one of the deities of the Hellenic Olympus, or to be the offspring of the prompting or leadership of a god or of some other being in close relationship to him. Its medium of exchange in the shape of money was, therefore, in one sense an outcome of its religion, and received its authentication from a religious sanction. According to Dr. Ernst Curtius, so great an influence had the religion of the state upon its coinage, that it was issued from the temples, and was the *νόμισμα* of the god therein worshipped rather than of the civic community, if, indeed, in early times the god and the state can be separated. The temples were, on account of the offerings and bequests, and from other sources, the great receptacles of property, the banks in fact of the time, and were therefore under the most favourable circumstances for becoming the issuers of money, and to profit by the transaction. A somewhat similar position was occupied by the great religious houses

of the Middle Ages, which accumulating wealth by offerings made to the shrines of saints and for masses, were enabled through the possession of money to become lenders of it, and so in the end, by obtaining mortgages upon land, to become its owners.

The authentication of the currency being, therefore, a religious privilege, whether the money was issued from the temple treasuries or from the mint of the state, the designs on the coins, which were the tokens of its being of a certain weight and quality, were symbols associated in one way or another with the deity whose temples were within the limits of the state. The symbol, therefore, which constituted the badge or arms of the state, was in every sense a religious one, and signified that the city was under the protection of the divinity with whom the symbol was connected. To give a single well-known example, the coins of Athens, from the earliest to the latest period of its independence, bore on one face the head of Athena, and on the other the owl and olive-spray, both so intimately connected with her. The coin-types, therefore, of a Greek state usually bear upon them the impress of the religious cults of the state. In the case of Cyzicus, however, the coin-types do not appear to have been selected with the same rigid adherence to local worship as in most Hellenic cities, though the practice had still a certain and even considerable influence upon the coinage. It will be desirable, therefore, to give a short account of the various cults which, as we learn from historical relation, prevailed at Cyzicus.

The city was provided with a large number of temples, witnessing to the skill of its architects, who were renowned throughout Greece. Cicero (*Pro lege Manilia*) tells us that Cyzicus was one of the most beautiful cities of the

Greek world, and according to Strabo, it rivalled the first cities in Asia in size and beauty.² Among its buildings the temples ranked as the most beautiful, and in them were honoured nearly the whole of the gods and goddesses of the Hellenic Pantheon. It is not impossible that the large and wide connection which Cyzicus had with the trading communities of various countries may have been the means of introducing some of their cults into the state, and that as she derived many of her coin-types from the currency of other cities, so she may also have adopted their peculiar gods and worship.

Among the divinities worshipped at Cyzicus, one of the most popular was Cybele, the Magna Mater of Phrygia, who ultimately became merged in the Hellenic Rhea, the mother of the gods, herself probably of Oriental origin. Her worship was introduced at an early period from Phrygia, and she was known at Cyzicus under the name Dindymene, from the mountain Dindymus, in Phrygia, which had its counterpart in another Dindymus close by Cyzicus. She also appears under the name Lobrina, from the mountain Lobrinion, and Placiana, from a town, Placia, where she had a shrine, near Cyzicus. A legend tells us that her worship was brought into Mysia and the Troad by Dardanus. The worship of Rhea appears to have been carried into the Troad and the district about Mount Ida at an equally early period, and Mysia seems to be the country where the two myths, the Phrygian and Hellenic, became united in one.

In intimate association with Cybele is Atys, the shepherd changed into a pine, a tree which, keeping its verdure through the winter, is a fitting emblem of the vivifying

² Book xii. p. 71.

influence of the sun, with whom Atys may perhaps be identified. He appears to occupy much the same position in regard to Cybele as Alexander-Paris does to Aphrodite, who again, in her Oriental aspect as Astarte, comes into very close relationship with Cybele, as Atys does with Adonis. The Phrygian goddess especially associated with mountains, where her images, many of them unhewn stones, probably aerolites, were most frequently placed, as the great goddess of the wild, is usually accompanied by the lion. She is represented in a car drawn by lions, or seated on a throne with a lion on each side.³ She usually wears the turreted crown, and the pine-tree was sacred to her. Herodotus relates that when Anacharsis visited the city, there was a great feast held at Cyzicus in honour of this goddess.⁴

Apollo and his sister Artemis are also prominent deities at Cyzicus; and as the father of Cyzicus, no god might seem to have greater claims than Apollo for worship at a city founded by his son. In his capacity, also, of ἀρχηγέτης of the colony from the Ionian city Miletus, Apollo Didymæus was regarded as a second founder of the state.⁵ The connection between Cyzicus and Miletus, through the god, appears to have been long maintained, for in the time of Prusias II (B.C. 180—149), Cyzicus gave presents to the temple of Apollo at Miletus.⁶ As Lycius, the god of light, he was worshipped at Zeleia, a town in Cyzicene territory, and at Adrastia, as Ἐκβασιός and Ἀκραῖος, he had an oracle, jointly with Artemis. The

³ In her temple at Cyzicus, under the name Dindymene, there was a marble statue of the goddess between two lions held by her. Zosimus II. 31.

⁴ Herod. iv. 76. Clem. Alex. 1715, ed. Potter, vol. i. p. 20.

⁵ Aristides, vol. i. p. 388, &c. (Dindorf, 1829.)

⁶ Boeckh, *Corp. Inscr. Græc.*, vol. ii. Nos. 2855, 2858.

Hyperborean Apollo naturally has an intimate relation with the city, through the gold which, brought from the regions guarded by his griffins, so abundantly supplied the mint of Cyzicus.

The worship of Artemis may have been brought from Miletus together with that of Apollo, her brother. A feast was held in her honour, and gifts were made to her by the people of Cyzicus, at her temple at Munychia, from which she had one of her names.⁷ As λιμενοσκόπος, the harbour-guardian, she was especially and appropriately revered at so important a sea-port as Cyzicus.⁸ She was also worshipped in Cyzicene territory as Θερμαία, at hot springs on the river Æsepus.⁹

Persephone, equally with Cybele, was worshipped at Cyzicus with peculiar cults and usages. According to Appian,¹⁰ the city was given to her by Zeus as a marriage-gift, and in consequence she was honoured there above all other gods, and a black cow was sacrificed to her, possibly as the wife of Hades, the god of the lower regions, the abode of darkness. Appian tells a story which possesses much picturesque interest. During the siege of the city by Mithradates, the people were reduced to such straits that they were unable to provide a suitable cow to sacrifice to Persephone; they therefore prepared one made of flour as a substitute. And now a marvellous event took place; a black cow swam through the hostile fleet and placed herself in front of the altar ready to be sacrificed. So moved was Mithradates by the incident that he raised the siege, not daring farther to molest a city that

⁷ Boeckh, vol. ii. No. 3657.

⁸ Callimach., *Hymn. in Dianam*, vv. 39, 259.

⁹ Aristides, *Orac. Sacr.* iv., vol. i. p. 503 (Dindorf).

¹⁰ *Bellum Mithrad.* vol. i., ed. 1670, p. 371.

was protected by so powerful a goddess.¹¹ Cyzicus claimed also to be the scene of the rape of Persephone.¹²

Of her mother Demeter historical relation gives but little account in connection with Cyzicus. Nor is anything recorded which enables us to obtain a knowledge of the worship of any of the other gods there, except what Athenæus relates,¹³ that there was in the city a statue of Dionysus in the form of a bull.

The Argonautic expedition is the most important myth in connection with the history of Cyzicus, and includes Heracles and the young king Cyzicus, slain through misadventure by the Argonauts. The latter, as the founder, is most intimately associated with the city which bore his name, and there is an inscription which records that a statue was dedicated to him as *κτίστης*.¹⁴ Games were held in his honour,¹⁵ and his tomb is mentioned by Deilochus.¹⁶

The importance of Cyzicus as a commercial and trading community began at an early time. Already in the sixth century B.C., if not before, its trade had extended widely, and it became a place whose alliance was sought for by other and distant states. It is true that it was not until a later period that its business intercourse with the Euxine was completely developed, by which it was enabled, besides other lucrative commodities, to draw a large supply of gold on very favourable conditions, through Panticapæum, from the rich metalliferous district

¹¹ Plutarch, in his "Life of Lucullus," also relates that the image of the cow was made of paste, and adds that the sacrifice was acceptable to the goddess.

¹² Propertius, iii., *Eleg.* xxi. v. 4.

¹³ xi. p. 476, A.

¹⁵ *Apoll. Rhod.* I. 1057 *seq.*

¹⁶ Schol. in *Apoll. Rhod.* I. 1061.

¹⁴ Muratori, p. 1042, 5.

of the Ural Mountains. In no way is its wealth more clearly evidenced than by the large amount of money which it issued, itself a source of profit by no means inconsiderable. This abundance of money is shown not only by the coins themselves, which still remain so numerous and so varied, but by the accounts we possess from various sources, of the large way in which its staters were stored, and how commonly they were in use as a circulating medium over a wide area.

Cyzicus does not appear to have had any silver or gold currency, except a very limited one, during the earlier days of its prosperity; indeed gold never, as in the case of the not distant Lampsacus and Abydus, superseded the earlier electrum coinage.¹⁷ No silver coin is known belonging to a time before the fourth century B.C., except one or two excessively rare pieces, and it appears to be impossible that so few should have come to light if they had ever been systematically issued. It is very difficult to account for this; the more valuable currency of electrum might be sufficient for large commercial purposes and distant trading, but coins of the less valuable metal would be required, it might have been expected, for the ordinary home trade of the state.

Throughout the long period during which Cyzicus issued an electrum coinage one standard only was in use, the Phocaic.¹⁸ It consisted of three denominations, the

¹⁷ A Daric, which has the prow of a ship on the reverse, may possibly have been struck at Cyzicus during the satrapy of Pharnabazus, but it cannot be considered as a coin of Cyzicus itself.

¹⁸ The Phocaic standard, the stater of which had a maximum weight of 256 grs., appears to have been based on the Babylonian gold standard, the sixtieth of that mina being 260 grs. Head, *Num. Chron.* N.S., vol. xv. p. 282.

stater, hecta or sixth, and the half-hecta or twelfth. The stater, though it sometimes rose as high as 252 grs., may be considered to average as its highest weight 248 grs., the hecta 41 grs., and the twelfth about 20 grs. There appears to have been a coinage of double staters, but the issue must have been small and probably quite abnormal, for no such coin has yet been discovered. The evidence for its existence is contained in the schedule of the Treasury of Athena in the Parthenon, where, in the list for Ol. lxxxix. 3, B.C. 422 and succeeding years, there is mention made of τετράδραχμον χρυσῶν of the weight of 500·6 grs., which is just the double of a stater of quite full weight.¹⁹

The metal of which the Cyzicenes are composed is what was called electrum, or white gold, and consists of gold and silver in combination. That used at Cyzicus is of a deeper colour than that of the early electrum coins of the Asiatic standard, attributed to Miletus, Ephesus, Cyme, Samos, &c., and, though varying to a great extent in that respect, it never approaches the colour of pure gold, such as the gold of the staters classed to Sardes in the time of Croesus, or of the Darics. No Cyzicene stater has, so far as I am aware, been analysed, and it is therefore impossible to say what are the exact proportions of the metals of which they are composed. The specific gravity has, however, been taken of about half-a-dozen staters of different types, by which it appears that the proportion of

¹⁹ *Inscr. Atticæ*, Kirchhoff, vol. i. pp. 61, 62, Nos. 165, 166, 170, 171, 173. A coin-weight of bronze first published by Caylus and afterwards by Lenormant (*Rev. Num. N. S.* vol. i. p. 7), has upon it with a tunny the inscription ΚΥΙ ΔΙC, which latter he expands into διστάρηρον. It weighs 29·90 gram., which, allowing for loss by oxidation, is just the weight of a double stater.

gold to silver varies very greatly in different specimens. The following are the exact figures :

	<i>A</i> per cent.	<i>AR</i> per cent.
Satyr holding tunny	52·25	47·75
Boar l. on tunny	52	48
Lion with fore-paw raised, on tunny	39	61
Head of Pallas on tunny (archaic style)	38·48	61·52
Head of Ammon on tunny . . .	38·44	61·56
Dionysus recumbent l. on pan- ther's skin ; beneath, tunny .	27	73 ²⁰

It also seems certain that the metal is an artificial and not a natural alloy. Gold is, however, sometimes found which has a native alloy of silver combined with it, and it is quite possible that some of the earlier issues of electrum coins may have been struck in native electrum. For instance, the metal of the early Lydian coinage was very probably obtained from the sand of the river Pactolus or from the mines of Mounts Tmolus or Sipylus. Analysis has shown the proportion of gold to silver in this case to be about three to one. Some of the electrum coins of the Asiatic standard, of Miletus and other towns, already referred to, may also have been struck in the same native electrum. But even among the early electrum coins, as of Ephesus, there are some so pale in colour as scarcely to be distinguished from silver except by their weight, which shows them to be adjusted to a divisional system other than that used in the silver coinage of the state to which they belong. These coins can only be the production of an artificial admixture of the two metals, for no gold is

²⁰ For further details see K. B. Hofmann, *Num. Zeit.*, 1884, p. 33, and F. Hultsch, *Zeit. f. Num.*, 1884, p. 165.

found in a natural state which has so large a quantity of silver in alloy as these in question must possess.

In the case of Cyzicus there cannot be much doubt that the greater part, if not the whole, of the electrum used in the coinage of its staters and hectæ was an artificial product and not of natural origin. Gold is not often found in the condition of electrum, and the principal source of supply of that peculiar metal must to a great extent have been worked out before the large issue of Cyzicenes began. There would therefore be a difficulty in obtaining a sufficient quantity of the requisite quality without manufacturing it from purer gold. The most abundant supply of gold for the Cyzicene mint, as we have reason to believe, came from a district—the Ural Mountains—where the metal is of such a nature that to make it of the quality of the staters would require the addition of silver.

The question whether the electrum money was intended to pass current for gold or not has also been a subject of controversy. If the electrum staters and hectæ were issued as gold coins, a large profit must have been gained by the transaction, as the price paid for the alloyed metal must have been much less than that paid for the pure. They certainly possessed one advantage over gold coins in the increased hardness gained by the addition of silver, and the consequent saving in wear and tear. That they were meant to circulate as coins of pure gold appears to be improbable. At the time they were being issued the people among whom they were current were accustomed to gold as applied to decorative purposes and for ornaments. And during at least a part of the time when the Cyzicenes were among the most important of the coins in use in commerce, other coins of pure gold, such as the Darics, and staters of Lampsacus, were equally circulating

as trade mediums. People must therefore have been well acquainted with the two metals and quite able to discriminate between them. It must, I think, be regarded as almost a certainty that the electrum coins had a value of their own, different from what they would have possessed if they had been gold coins of the same weight. On the other hand, they are described in the account of the Surveyors of Public Works at Athens, B.C. 434, as χρυσοῦ στατήρες Κυζικηνοί, Cyzicene gold staters,²¹ and after the same fashion in other public accounts at Athens during the later part of the fifth century.²² In one instance, in the schedule of treasures τῶν ἄλλων θεῶν, in the year B.C. 429, they are classed with Δαρεικοῦ χρυσίου στατήρες (the Daric being of pure gold), and with Phocæan hectæ of electrum.²³

The monetary value of the Cyzicene stater is a question of much difficulty. We gather, however, that, at the time of the retreat of the Ten Thousand, it was estimated higher than the Daric, for in B.C. 400 the soldiers were promised, presumably as increased pay, a Cyzicene a month, what they had received previously having been no doubt a Daric.²⁴ We have, however, more exact information of the value of the Cyzicenes towards the latter part of the fourth century. Demosthenes, in his speech against Phormion, says that the stater of Cyzicus was at that time, about B.C. 335, worth twenty-eight silver Attic drachms in Bosphorus, the same value as in B.C. 434 a gold didrachm, weighing 130 grs., obtained at Athens.²⁵ They had, perhaps, before the end of the fourth century become deteriorated in value

²¹ *Inscr. Atticæ*, Kirchhoff, vol. i. p. 158, No. 301, *seq.*

²² *L.c.* vol. i. p. 79, No. 180, *seq.*

²³ *L.c.* vol. i. p. 90, No. 199.

²⁴ Xenophon, *Anab.* v. 6, 23; vii. 3, 10.

²⁵ *Inscr. Atticæ*, Kirchhoff, vol. i. p. 160.

from what they had been at its commencement. In the meanwhile there had entered into commerce the large issues of the staters of Philip of Macedon, coined in various places in his kingdom from the gold of the rich mines of Philippi. This abundance of coins in the pure metal would almost necessarily reduce the Cyzicenes to the same value, circulating as the Philips did in the same countries where before then the Cyzicenes to a great extent had a monopoly.

Whatever the precise value of the Cyzicene stater may have been during the period when it was being issued, it formed for more than a century, from B.C. 500, the principal currency for trading purposes of the cities on the shores of the Euxine and of the Ægean Seas. The only other large coins of gold, whether in a pure state or alloyed with silver, were the electrum staters of Lampsacus and the Darics. Phocæa, Lesbos, and other states, not easily identified, though issuing numerous coins of electrum, struck, it seems, none of a higher denomination than hectæ, for no stater that can be attributed to these places is known. The earlier issues of electrum of the sixth, or possibly of the seventh, century had long ceased to be used in commerce, and the gold coinage of Lampsacus, Clazomenæ, Rhodes, &c., had not come into existence. Nor had Athens or Panticapæum at that time adopted a gold currency.

That the issue of staters by Cyzicus was very large is shown by the number of coins of various types which are now known, though so few had come to light in the time of Eckhel that he doubted if the stater of Cyzicus was ever anything more than money of account. But in addition to the coins themselves we have the evidence of Treasury lists and accounts of expenditure at Athens,

which show how common was the coin during the fifth century, and how important an element it was in the commercial dealings of that time. It did not require the satirical remark of Eupolis in his comedy (*Πόλεις*), *ἦδε Κύζικος πλέα στατήρων*, to tell us how abundant were the Cyzicenes at the time he wrote.

A large supply of gold was needed to furnish the mint at Cyzicus with metal for its coinage, and it is not easy to ascertain the source whence, in the earliest period of the issue of the staters, it was obtained. Gold is found in considerable abundance in several parts of Asia Minor, and it is probable that Cyzicus may have obtained some of the raw metal from these places. The rich mines of Thrace and Macedon, so prolific in the reigns of Philip and Alexander, may also have supplied other portions. Nor is it impossible that trading relations may have even then been established with Panticapæum, though Athens jealously guarded her interests there. In the later period of the issues of Cyzicenes there can be little doubt that the principal source of supply was the district of the Ural Mountains, the gold of which passed to Cyzicus through the market of Panticapæum. The commerce of the Euxine had no doubt been kept by Athens in her own hands as far as was possible; but even before she lost the hegemony which had for many years been hers, Cyzicus had traded in those waters, and to the same port. M. Charles Lenormant appears to think that it was only after the defeat of Athens in Sicily in B.C. 413, and the victory of Sparta over her at Ægospotami in B.C. 405, that the monopoly of the gold from the Urals was lost to Athens and came into the hands of Cyzicus. This opinion is to some extent influenced by his belief that the Cyzicenes belong in the

main to the fourth century, an opinion which I think cannot be maintained. Whether Cyzicus obtained gold from Panticapæum before the declension of the power of Athens, as I believe she did, or not, it is certain that for many years that place was a principal centre of supply. It is enough to mention that several finds of Cyzicene staters have taken place near Kertch to show the trade connection between the two states, a connection which was a very profitable one for Cyzicus. It is evident that gold, as indeed might be expected, was of less than its ordinary value at Panticapæum, from the fact that the stater of that city was considerably in excess of the ordinary weight, rising as high as 140 grains. In further proof of the low price of gold there, M. Charles Lenormant (*Rev. Num.*, vol. xx. p. 29) has shown that, whilst in Greece the proportionate value of gold to silver was as one to ten, at Panticapæum it was as one to seven. Such a condition was, therefore, most favourable to Cyzicus, which bought gold there at a price much less than that current in Greece, and benefited largely by the exchange. Cyzicus was not likely to go beyond so favourable a market, and it may be considered as certain that she received, at all events during the later period of the issue of the staters, the greater part of the gold required for her mint from Panticapæum. The gold which we suppose Cyzicus obtained through this channel from the Urals has proved, by analysis of the metal from Siberia by M. C. Rose, to contain, as a maximum, sixteen parts of silver and a trace of copper, out of a hundred, a little less than one-fifth, a proportion of silver much less than what the electrum of the staters undoubtedly possesses. There must, therefore, have been a further addition of silver made before the staters and hectæ were issued from the mint of Cyzicus.

One of the most important subjects in connection with the electrum currency of Cyzicus is that of the types which occur upon its coins. It affords the most valuable and largest illustrations we possess of the various cults which prevailed there. This is, however, to some extent modified by the habit at Cyzicus of copying the types of other states, a practice which will be more fully considered later on. There is no Greek state which produced so many and such varied types as did the city of staters upon its electrum coinage. The series upon the coins of Abdera is doubtless a very extensive and interesting one, but it falls short of the number upon the coins of which I treat. [May I be allowed to express a hope that some one will undertake an account of the coins of Abdera. No more acceptable work could be offered to numismatic science.] Before, however, giving a description of the different types, and attempting to divide them, as far as is possible, into their several classes, it will be necessary to give a general account of the coins in question.

It has been already mentioned that the whole of the electrum currency of Cyzicus was struck after one standard, the Phocaic, but it is divided into two very distinct coinages, both in respect of date and appearance. The earliest one comprised, it appears, a single issue, of which, so far as I know, a single specimen is known. It is the stater No. 1, and differs from all the other electrum coins of Cyzicus, not only in the form of the incuse of the reverse, which is most distinct from that of the general body of the Cyzicenes, but also in the subject of the obverse, which separates itself from the ordinary features of the staters in general, though perhaps the stater No. 161 may appear to have something in common with it. Different though it is, there can be no doubt that it is a

coin of Cyzicus; the weight and the type afford sufficient grounds for attributing it to that state without hesitation. The type contains, as its principal part, the badge or arms (*ἐπίσημον*) of Cyzicus, the tunny fish (*πηλάμυς*), a very valuable product of the Propontis, where enormous numbers were captured on their migratory passage, backwards and forwards, between the Euxine and the Ægean Seas. This badge—and upon the stater in question it is the principal type—continued to be placed on the money of Cyzicus, as a subordinate though distinguishing symbol, during the whole issue of her electrum currency.

The second and long-continued coinage of electrum money, which bears upon it, as I have just stated, the tunny as a subordinate symbol, has for the principal type on the obverse a large number of very varied subjects. The reverse, however, throughout the entire period of the several issues, consists of an incuse (Pl. I. 1 A, 1 B) to which, on account of its resemblance to that apparatus, the name of mill-sail has very appropriately been given. This incuse, while retaining its general form, varies considerably, and markedly in one particular. The two sunken parts of the mill-sail pattern in many of the coins have a plain surface (1 A), while in others, and they belong to the later issues, the surface is granulated (1 B), or has short raised lines upon it.

The name of the city is not found upon a single electrum coin, and indeed upon one alone (No. 54) is there any inscription at all. Though there is nothing in the shape of a name by which to class these coins to Cyzicus, the presence of the tunny upon them is sufficient for their attribution, just as the seal (*phoca*) upon certain hectæ enables us to give those coins to Phocæa. Upon some of the silver coins, however, the name of the city is to be

found, together with the tunny, and upon a coin-weight of bronze, already noticed, first published by Caylus and afterwards by M. Charles Lenormant,²⁶ the tunny and the name of the city are both present.

In considering the types it will be necessary, in the first place, to make an attempt to classify them according to their subjects, and to attach them to the several gods or myths to which they appear to belong; and, secondly, to trace those types which seem to be of foreign origin to the states from whose coinage they have been copied, or from which, on account of the subject, they appear to have been adopted. Both these inquiries have, to some extent, been carried out in the separate account of the various coins; but it seems desirable to make a more systematic classification than could be made under the head of each type.

In connection with the types it is necessary to state that it is highly probable that the subject upon each stater was also produced upon the smaller denominations of the same issue. It is impossible, with our present imperfect material, to change this probability into a certainty, but there are so many cases where staters and the subordinate parts have the same type upon them, that I believe it is only because so many coins are at present lost to us that we do not possess the full complement of stater, hecta and twelfth of every type.²⁷

To commence, then, with the great gods of the Olympian hierarchy:

To Zeus may be attributed with certainty the figure with eagle, No. 2, and the heads of Zeus-Ammon, Nos. 3, 4,

²⁶ *Rev. Num.* N.S., vol. i. p. 7, Pl. I. 2.

²⁷ A table of all the types, showing in each case the denominations at present known, will be found at the end of the introduction.

and possibly the staters with an eagle, Nos. 151 to 153, though No. 151 may be merely a copy, somewhat varied, of a coin of Elis or of Agrigentum, and Nos. 152, 153 may be symbols of Helios.

To Poseidon may be attributed with certainty Nos. 5 to 8, and Nos. 9, 10, in connection with his son Taras, though here we have direct copies of two Tarentine types. Triton, No. 11, may also be classed to Poseidon, though he has an individuality of his own. The horse, No. 126, the dolphin, No. 157, and the pistrix, No. 169, cannot well be separated from Poseidon, though Apollo has a claim to the dolphin; and the strange types from No. 158 to No. 168, including the crab, No. 159, and the shell, No. 160, appear to fall into the same category.

To Demeter may be attributed Nos. 12 to 15, and the stater with Triptolemus, No. 16, must be included in the same class.

To Apollo, as might be expected, a large number of coins may be attributed. Direct representations of the god are found upon Nos. 17 to 21, and the omphalos, No. 22, and the lyre, No. 172, are both in the closest connection with him. Helios, No. 23, the sun-god, represents the Oriental side of his attributes, and the head placed on a disk, No. 77, is possibly one of Helios. The griffin of Apollo occurs on Nos. 143 to 150, though these types may originate in coins of Teos, Abdera, or Panticapæum. The dolphin, No. 157, was sacred to him, but Poseidon has, perhaps, the better claim.

Artemis does not occur herself, but she is represented by the head of Actæon, No. 24.

Pallas is not found, except in representations of her head, Nos. 25 to 29, if all of these are heads of the goddess. The very strange head, No. 30, cannot be one

of Pallas, but may possibly, if a Gorgon-head, be connected with her. Gaia, No. 31, and Cecrops, No. 32, portions of a group where Athena receives Erichthonius as his protector, naturally fall into the same series of Pallas subjects, which may also include Harmodius and Aristogeiton, No. 76, since Pallas and Athens are inseparable.

Aphrodite is certainly represented, and accompanied by Eros on No. 34, and, somewhat doubtfully, in the head, No. 33.

Of Hermes there is only the head, No. 35, though the goat, Nos. 133, 134, may have its place on the coins in connection with him, Dionysus, however, having as good a claim.

No other of the Olympian deities appear on the electrum coins of Cyzicus, but the Great Mother, though only appearing in one instance, No. 55, in her own person, and once again through the head of Atys, No. 56, is very fully represented by the lion, Nos. 103 to 117, though it is quite possible that in many, if not in all of these types, it is not in connection with Cybele that the lion occurs.

Among the gods of a lower rank, Dionysus is by far the most frequently found on the coinage of Cyzicus. He occurs himself on Nos. 36 to 39. In connection with him and his rites we have the head of Pan, No. 40, the centaur, No. 46, and satyrs, in one or other aspect, on Nos. 41 to 44, and a satyric mask, No. 45, and a bi-frontal head, No. 47. The ass, No. 129, probably belongs to him, and the fox, No. 142, was sacred to Bassareus, the Lydian Dionysus.

Asclepius may be represented, though it is very doubtful, through the fore part of the cock on No. 155 and the cock's head on No. 156.

A Nereid, or Thetis, appears on No. 48, and the type on No. 49 is distinctly Scylla.

River gods occur in the form of a man-headed bull on Nos. 50, 51, though the latter may have no connection with any river near Cyzicus, being a perfect copy of the ordinary coins of Gela.

Nike is represented on Nos. 52, 53, on the first stater, in commemoration of a naval victory; and Eleutheria, with her name attached, occurs on No. 54.

The voyage of the ship Argo and the myth connected therewith, interwoven into the legendary history of Cyzicus, introduces us to Heracles, who is represented on Nos. 62 to 69; and on No. 141 we have Cerberus, whom he chained in Hades.

It is quite possible that Jason is the warrior who is adjusting his arrow before fitting it to the bow on Nos. 93, 94, and the Scythian archer, No. 95, may have reference to the voyage to Colchis. With either Jason or Helle, the ram on Nos. 130 to 132 was very probably associated, and there cannot be much doubt that the prow on No. 170 is of the ship Argo.

Perseus himself occurs on No. 74, and his head on No. 73, and in connection with him there is the Gorgon-head on No. 75. Bellerophon, another solar hero, brings in the Chimæra on Nos. 119, 120, and also Pegasus on No. 127, though it probably occurs as a copy of the common type of Corinth.

Odysseus appears to have the best claim, though it is disputed, to the head on No. 70, and to be the warrior killing the ram on No. 71. Nor do I think there can be any doubt that the suppliant by the omphalos on No. 72 is Orestes. And the head on No. 80 is quite possibly of the native hero Cyzicus.

A large number of types still remain which it is difficult to assign to any special god, hero, or myth, some of them possibly connected with Oriental cults. Among these are several heads, male and female, as Nos. 78, 79, 81 to 84; winged human figures, Nos. 58, 59, 61, and a winged lion-headed man, No. 57, possibly Fear ($\Phi\acute{\epsilon}\beta\omicron\varsigma$). There are also several human figures, carrying the tunny, Nos. 86, 87, 88, 89; on the stater and hecta, No. 88, holding also a knife; carrying a helmet on No. 90, and holding a shield, Nos. 91, 92. Then again there are harpies, sphinxes, bulls, swine, and dogs, which it would be hazardous to allot, and which I prefer to leave to the ingenious speculation of persons more imaginative than myself.

The question arises with regard to the subjects on the staters which can be appropriated to gods or myths, whether they are derived from gods worshipped at Cyzicus and to local myths, or from gods and myths belonging more especially to other places. It is impossible to decide this question with any degree of certainty. But there can be no doubt whatever that Cyzicus adopted subjects belonging to cults foreign to her and placed them on her coinage. She appears to have followed this practice much more freely than did any other state; indeed, it is one almost peculiar to herself. For the reason of this we must probably look to the wide-spread commercial intercourse her citizens had with places where gods and cults prevailed, strange to herself, and in some cases strange even to Hellas itself. It may well have happened that persons of importance in the state, and connected, as magistrates, with the coinage, had intimate relations of one kind or another with foreign and even far-distant places. Such persons may have sought to distinguish that connection by placing upon the coinage of their own

city, types selected from coins of the states with which they were holding intercourse; or the state itself of Cyzicus may have wished to ingratiate itself or conciliate by such a process other states with which it was connected by trade or treaty. This appears to be illustrated by the subjects on some of the staters which have a direct reference to Athens, a state with which Cyzicus held the most intimate relations, even to the extent of being for many years, during the period of the electrum issue, under her hegemony. But Cyzicus carried the practice of placing on her coinage subjects connected with other states and their religions still farther. Many of the staters are direct copies of the coins of other places, the only difference between the two types being the introduction of the tunny upon the Cyzicenes. An examination of the plates will at once show the coins just referred to, but it may be useful to place them specifically before the reader in order that they may be the more readily distinguished.

The two staters, Nos. 9, 10, are identical in all essential points with well-known and common didrachms of Tarentum. Apollo holding a bow and watching the effect of the arrow he has just discharged, No. 18, occurs on a hemi-obol of Sicyon. Perhaps no one of the heads of Pallas can be regarded as a direct copy of her head on the money of Athens, but the head of Pan, No. 40, is so like that on the coins of Panticapæum, that the one must almost certainly have been taken from the other. The forepart of the human-headed bull, No. 51, might have come from the mint at Gela, but for the metal of which it is composed and the tunny upon it. The head of Odysseus, No. 70, is an exact counterpart of that on a gold coin of Lampsacus, but it is difficult to say which is the prototype. The beautiful female head, No. 85, is a close copy

of one on a tetradrachm of Syracuse. The lioness devouring, No. 109, finds a counterpart in an archaic coin, of which many have been found in Italy and near Marseilles, but which is probably from the mint of Phocæa. The lion's scalp, No. 113, though differently treated, is similar to the ordinary type of Samos. The two bulls, Nos. 121 and 122, the one standing, the other butting, are so like to the same animal on the coins of Poseidonia and Thurium, that they cannot be regarded in any other light than as copies, and the same may be said of Pegasus, No. 127, in relation to Corinth. The sow, No. 136, is identical with one on an early electrum stater of the Asiatic standard of uncertain attribution, and the forepart of a winged boar, No. 137, is very like that on the coins of Clazomenæ. The Chimæra, No. 120, bears a strong resemblance to the same monster on an early electrum coin of the Phocæic standard, attributed by Mr. Head to Zeleia. The griffin, No. 144, must have been executed by an artist who had before him, in his mind's eye at least, the kindred creatures of Teos or Abdera, and the eagle, No. 151, is the same bird as that of Elis, while that on No. 153, is essentially one with the eagle on an electrum coin of the Asiatic standard, attributed to Abydos. Other coins might, perhaps, be added to this list, but those above referred to are the most evident copies.

The varied character and the large number of types on the electrum coinage of Cyzicus may, perhaps, be accounted for by the long period during which these coins were issued, and, no doubt, with some modifications, this was one cause of the diversity of types. Where the practice of placing a mark on the coin, to designate the magistrate under whose authority the coin was issued,

was in use, and when that practice had prevailed over a long period of time, it follows as a necessary consequence that the coins should present a large number of these distinguishing marks.

As a rule these marks were subordinate to the symbols forming the badge of the state, which usually occupied the most prominent position on the coin. At Cyzicus, however, a quite different custom prevailed; the magisterial device became there the principal subject on the coin, the badge of the state occupying a secondary position. In relation to the annual issue of coin-types at Cyzicus, M. Six has argued,²⁸ and with much force, that each type denotes the coin-issue for one year, under the authority and containing the distinctive mark of the magistrate in authority for that year. Mr. Head dissents from this opinion, and I think on just grounds. The art style of the coins is the best, indeed, almost the sole evidence we possess in regard to their date, for we have scarcely any help from history, and, in the absence of inscriptions, we have no aid from letter-forms. Judging, then, by their style, if we accept M. Six's theory we should, in my opinion, be compelled to compress far too large a number of different coins into a given period than would be possible if only a single type had been issued in each year. We may agree, I think, with Mr. Head that it is "more probable that several, perhaps numerous, types were in use at one and the same time." As the superabundance of coins of different types during a given period is one objection to M. Six's view, so the paucity of coins during other periods may also be urged against it. This, however, is a much less valid objection than the first, because we cannot tell how many types

²⁸ *Num. Chron.* N.S., vol. xvii. p. 171.

which are now entirely lost to us may have been issued from the mint of Cyzicus.

When we come to the consideration of the time during which the electrum coinage of Cyzicus was in course of issue, we are left without any direct evidence from historical relation, and are, therefore, obliged in the main to judge from the coins themselves, their fabric and their art. At first sight they might appear, on account of their thick and lumpy appearance and the nature of the reverse, to be much earlier than they are. These features are, however, merely survivals, and, like the archaic head of Pallas on the later coins of Athens, were probably retained by Cyzicus on account of trade requirements. The incuse on the reverse was kept up at Cyzicus long after its use had ceased in all other places except at Phocæa, where it is equally found on the *hectæ* of that state. That side of the coin must, therefore, be disregarded in the consideration of date, and the obverse with its type-subject must alone be our guide.

The stater, No. 1, already referred to, separates itself from all the other electrum coins of Cyzicus, not only by the difference of its reverse, but by the time of its issue. It is certainly much earlier than any of the electrum coins of what may be designated as the second series, and may be attributed to the first part of the sixth century B.C., if it is not as early as B.C. 600. It stands quite alone as the sole representative of the earliest coinage of the state.

For a period of almost a century Cyzicus does not seem to have had any currency. The Lydian gold coinage during that time probably supplied the commercial requirements of the Greek states of Asia Minor. Cyzicus had not then attained the wealth and importance of which she afterwards became possessed.

Some time about the year B.C. 500 Cyzicus appears to have commenced the issue of the celebrated χρυσοῦ στατήρες *Kυζικηνοί*, together with the smaller denominations, hectæ, and half-hectæ or twelfths, with which she was for many years to be identified, and which made her one of the richest cities of Asia Minor. That the first issue of this series could not have taken place much, if at all, later than B.C. 500 is shown by the style exhibited upon some of the staters. For instance, the figures, Nos. 59, 61, have all the characteristics of a very early date, one, possibly, still earlier than that specified as the commencement of the second series of coinage. The whole of the curious coins from No. 157 to No. 168, many of them with the fish-head, including the stater, No. 161, also appear to be rather before than after B.C. 500. Nos. 150, 154, may also be included in the same class. A little later than these, but still belonging to quite the archaic period, which Mr. Head proposes to close at B.C. 480, are the head of Pallas, No. 25, with the head in profile, but having the eye as if seen in front; the heads, Nos. 26, 27, 77, 78; the strange head, No. 30; the Satyric mask, No. 45; the bifrontal head, No. 47; the Gorgon head, No. 75; and the helmet, No. 171; Triton, No. 11; the Satyr, No. 41; the human-headed bull, No. 50; the lion-headed winged man, No. 57; the running figure, No. 58, and the two winged figures, Nos. 59, 61; Heracles with club and bow, No. 65; figure holding two tunnies, No. 87; the Harpies and the Sphinxes, Nos. 97 to 102; the forepart of lioness, No. 109; the forepart of lion, No. 110; the Chimæra, Nos. 119, 120; and the forepart of a winged boar, No. 137.

To a period not long after B.C. 480, may perhaps be attributed the head of Perseus, No. 73; the heads, Nos.

79, 84; figure holding tunny and knife, No. 88; the griffin, No. 145; the forepart of cock, No. 155; and the pistris, No. 169.

Without attempting any classification of them in detail we may regard a large proportion of the remaining coins as belonging to a period between B.C. 440 and B.C. 410. Among the coins which appear to have been issued during this interval may perhaps be included: The human heads, Nos. 3, 5, 17, 18, 21, 24, 28, 30, 36, 62, 73, 75, 80, 84, 85; the figures, Nos. 2, 6, 7, 8, 9, 10, 14, 16, 19, 23, 31, 32, 39, 42 to 44, 46, 48, 49, 53, 55, 63, 64, 66 to 69, 71, 72, 74, 86, 89 to 96; animals, 51, 60, 103 to 108, 113, 115, 117, 118, 121 to 127, 129 to 142; birds, 151 to 153, 155; monsters, 143, 144, 146, 148, 149; the prow, 170, and the lyre, 172. The remainder of the types, including Nos. 15, 19 to 21, 34, 38, 52, 54, 76, may be attributed to the time between B.C. 410 and the accession of Philip to the throne of Macedon, B.C. 359. Among the coins of the last class are some human heads, Nos. 12, 13, 33, 37, 81 to 83, which in the opinion of persons of high authority were struck not much, if at all, earlier than the time of Alexander. With every deference for this opinion I feel obliged to dissent from it, and to regard these coins, though, perhaps, belonging to the latest of the staters, as having been issued not later than B.C. 360. The conclusion, therefore, at which I have arrived with regard to the Cyzicenes is, that with the exception of No. 1, they all belong to the time between the year B.C. 500, or possibly a little earlier, and the year B.C. 360.

M. François Lenormant, holding the same view as his father, in the last account he has given of the Cyzicenes,²⁹

²⁹ *Dict. des Antiq.* Daremberg and Saglio, under "Cyziceni."

expresses the opinion that the principal issue was between the end of the Peloponnesian War, B.C. 404, and the time of Alexander, who began to reign B.C. 336. M. Six, whose authority is of great value, also considers that some of the staters were issued as late as the time of Alexander's accession.

If it were possible to adopt M. Lenormant's opinion, we should have to cast aside all considerations of style, though it is upon that evidence alone that the question of the date of the staters must be decided. It is, however, an opinion which cannot be entertained, for whatever view may be taken of some of the heads, no one can pretend to say, having regard to the style of the coins, that the greater part were struck after the year B.C. 404. In rejecting M. Six's view, which, however, has reference only to a very few of the staters, I by no means feel the same confidence. It is true, indeed, that the heads, Nos. 12, 13, and especially No. 83 cannot be rejected, on account of their style, as being inconsistent with the date M. Six attributes to them, but on the other hand it cannot be justly asserted that they may not have been struck before B.C. 360. It appears to be on the whole a safer conclusion at which to arrive, that the issue of staters entirely ceased before B.C. 360, than to suppose that, several years after that time, two or three types were struck in an abnormal way and quite out of due course.

The fact that Demosthenes mentions Cyzicenes as a common currency in Bosphorus in his own time has been considered a proof that they were issued as late as then. This evidence is, however, of a very inconclusive kind, since it is certain that a class of coins so largely issued and so widely circulated would continue to be used in commerce and in other ways long after they had ceased

to be produced by the mint. It does not need to adduce instances of so trite an occurrence. The same explanation may be given of Cyzicene staters having been found in a vase associated with coins of Alexander, as was the case at the Piræus a few years ago.

It is a fact which is indisputable that for a long period, and over a large area, the Cyzicenes, together with Darics, formed the principal gold currency of the shores of the *Ægean* and neighbouring seas. This position they held until a coin of purer metal was put into circulation in large quantities, and then when Philip of Macedon issued from numerous mints the stater which bore his name, Cyzicus ceased to enjoy the monopoly which had so long been hers, and the coinage of the Cyzicenes came to an end.

The position Cyzicus occupied in the Hellenic world in regard to art cannot, perhaps, be either fairly or fully estimated from the evidence afforded by its coinage. The process of engraving on a die, leaving out of consideration the limited space on which a subject has to be represented, does not allow that scope for artistic treatment which is granted to painting, to sculpturing in marble, or to casting in bronze. It is bound, like gem engraving, by laws existing within its own province of expression, which it cannot break, and from the control of which the kindred arts are more or less free. Subject, however, to these qualifications, the numerous representations of human and animal form and the way in which the characteristic features of gods and heroes, as well as those of the lower orders of life, are depicted upon the coins, enable us to form an opinion, though it may be an inadequate one, upon the artistic development of prosperous and wealthy Cyzicus.

We know that the school of painting there had produced

artists of eminence, and, though we do not hear so much of its sculptors, there can be little doubt that Cyzicus was not behind other cities of Asia Minor, whose temple decorations and other works of sculpture are still left to testify to the genius and skill of their inhabitants. The site of Cyzicus never having been excavated, we are left without the evidence which has been supplied by an examination of the remains of other cities, such, for instance, as Pergamon, with the sculptures of which place it is not improbable that Cyzicus had much in common.

As has already been stated, the coinage of a state does not afford a complete index of the wealth it possessed in the productions of its sculptors, nor does it indicate, except in an imperfect manner, the height to which at the place in question plastic art had attained. But at Cyzicus we have still less opportunity than at other cities of estimating by means of the coinage the artistic condition there. In most Hellenic states the coin-types were local, the outcome of the religious cults or myths of the place itself, and were influenced not only by the traditional and continuous teaching of the special art-school there, but also by the sentiment begotten of the worship of the gods with whom the city was, in one or other way, connected, and who were its tutelary guardians and protectors, and in some cases its founders. At Cyzicus, on the contrary, the subjects of the coin-types were to a large extent borrowed from other states, and her school of die-engraving was, at all events in the selection of the types, of the most eclectic kind. It is difficult, indeed, to say of many of her coins whether the subject upon them was indigenous to the city or was adopted or adapted from the coinage or sculpture of other and sometimes far-distant states, but that a considerable proportion belong to the latter class is unquestionable. With this limitation in respect of original

design, which, however, must not be carried too far, the artists of Cyzicus, who were the engravers of her coin-dies, show great skill and even power in the way in which they have treated the subjects at their disposal. In the separate description of each of the types which is given later on, it is noted from whence the several subjects, which are direct imitations of other coins or are copies of groups in marble, have been derived; but it seems desirable to give here a few instances of coins where such a reproduction has taken place. The staters Nos. 9 and 10, figure riding on dolphin and horseman, are copies of familiar coins of Tarentum. No. 51, forepart of human-headed bull, is the ordinary type of Gela; No. 85, female head, is precisely similar to one on a Syracusan tetradrachm; while Nos. 31 and 32, Gaia and Erichthonius, and Cecrops, are in all respects like to portions of a group in terracotta, itself no doubt copied from one in marble; and No. 76, Harmodius and Aristogeiton, represents a sculptured subject, once a celebrated and popular one at Athens. In the case of these types the artists of the mint of Cyzicus appear as little more than mere copyists, but there are other cases in which they have adopted a subject from a coin of another city but have modified it after their own fashion, showing in the process not only power of adaptation but of invention also. Instances of this may, perhaps, be found in No. 16, Triptolemus in the serpent car; No. 18, Apollo watching the effect of the flight of his arrow; No. 21, Apollo on a swan; No. 63, Heracles and Iphicles; No. 69, Heracles strangling the lion; No. 151, eagle tearing a tunny; and also in the lions, bulls, and griffins of which so many and different representations occur on the staters. In no way, however, have the Cyzicene die-engravers shown their skill more conspicuously than in the manner in which they

have adapted the subject to the space at their disposal; their success in this very important feature in the treatment of coin-types evidences much ingenuity and power in the moulding of form. Striking examples of this are shown in No. 38, Dionysus seated; No. 48, Nereid carrying a wreath; Nos. 52 and 54, Nike and Eleutheria; No. 68, Heracles holding club and lion's skin; No. 71, Odysseus slaying a ram; and the staters where warriors and others, satyrs among the rest, are represented in kneeling or bending positions. But they achieved a still greater success than this, for they have dared to make the great gods assume, yet without loss of dignity, the attitude almost of suppliants.

But the die-engravers of Cyzicus were not merely copyists or adapters of the works of other artists, they give evidence upon many of the staters of the faculty of original design. This appears to be as fully expressed in their treatment of Dionysiac types as in any other of the numerous subjects on the coinage, and, indeed, in relation to the currency, Dionysus figures at Cyzicus as a very prominent and popular god. The staters, Nos. 42 to 44, where satyrs are seen in different aspects, are examples of quite novel treatment of those attendants upon Dionysus, and they are examples as successful as they are novel.

It cannot, I think, be denied, after a due examination of the whole series of the electrum coins, that at Cyzicus, notwithstanding the eclectic tendency of its coin-types, due in some respects perhaps to commercial relations, a school of die-engravers was in existence which possessed not only a distinctive character combined with originality, but also much artistic power and skill in expression and adaptation.

The subjects represented on the coins seem to have been derived from many sources. Some are of original design,

some are simply copies of other coins, and some are modifications of the types on the coins of other states. There are also others which have been taken from single figures or groups in marble, in whole or in part, and which in some cases have been directly reproduced, while in others they have been changed in a greater or less degree in accordance with the taste or feeling of the artist, or to fit them to the requirement of the space on the coin. All those, however, which are not original designs give indications of the translation they have undergone, and show the impression they have received from passing through the mind and under the hand of the Cyzicene engraver. The prototypes of some of the coin subjects appear to have been separate groups or single statues; but others, and probably the greater number, were portions of scenes which ornamented the friezes and pediments of temples, or in some cases of metopes. If we had the good fortune to be in possession of the sculptures which decorated the temples of Cyzicus and other cities, neighbouring or foreign, we should doubtless find some which would give us the clue to the origin of many of the coin-types.

As might be expected, the greater number of the subjects belong to the cults and myths of Hellas, and we are brought face to face with Zeus, Poseidon, Demeter, Apollo, Pallas, and Aphrodite, Dionysus, Heracles, Odysseus, Orestes, and Perseus, though some of them present an aspect not quite in harmony with their Hellenic relations. There are also a large number which are more or less Oriental in their character. The greater part of these are subjects taken from cults where the ancient Hellenic mythology had become influenced and altered by Eastern systems of religious worship, but a few appear to be even still more directly and purely of Oriental origin.

On a review of the extensive and important series of the Cyzicene electrum coinage, extending as it did through a lengthened period, during which art had developed from almost its first beginnings to the highest perfection it ever attained, we cannot but be struck by the sustained excellence of the monetary art of Cyzicus. No state equalled it in the variety of subjects represented on its coins, as none excelled it in the high artistic qualities with which those subjects were endowed. There are coins, no doubt, among the large range of the money of the various states of Hellas, which surpass any that proceeded out of the mint of Cyzicus, but no state can pretend to equal it in the number and variety of works of such high artistic merit as the staters of Cyzicus present. If the coinage of this great commercial city on the Hellespont is contrasted with that of Athens, a state politically as superior to Cyzicus as its trading enterprises were more widely and largely extended, and which in art was at the head of all Hellenic culture, the difference is indeed marvellous. While the one city was issuing type after type, each one rivalling the other in the beauty and appropriateness of the design and the skill of its execution, the other was reproducing, century after century, almost without any change or advance in style, the same and only type with which she had commenced her monetary issue. The requirements of trade with the "barbarians" has been, and probably with truth, alleged as the reason why Athens, with all her wealth of sculptors and her supremacy in art, continued so long to send out from her mint the uninviting "owl." But there were the same requirements to be considered at Cyzicus, and that she rose superior to these considerations seems to demand from all who admit the claims of art to be a civilising influence, a very high recognition of her merits.

The circumstances attending the discovery of the staters, either of single coins or of a number found deposited together, is a matter of some importance, and we should be much assisted in any inquiry as to the area within which the Cyzicenes circulated, and to some extent also in regard to the time at which certain types were issued, if we were in possession of correct information about the finding of these coins. It is, however, only on rare occasions that anything authentic can be ascertained as to the number, contents, and place of finding of the various hoards which have been brought to light. We are, however, fortunately in possession of fairly trustworthy details connected with two deposits of Cyzicene staters, and also of the places where a few single coins have been found. In the neighbourhood of Kertch, the ancient Panticapæum, several deposits of Cyzicenes have occurred, some, as has been stated, in the numerous and rich tombs with which the locality abounds. No exact account has been given of these finds, and it is believed that the coins were in most cases melted. Some isolated staters have also been met with near Kertch, which have been preserved, and which are noticed in the following account of the staters. Of the two hoards above referred to, both of much importance, I propose to state shortly what is known of their contents.

The first was discovered in the year 1875, not far, it is believed, from the site of Clazomenæ. It consisted of several Darics, many electrum staters of Lampsacus, and a large series of staters of Cyzicus, but no hectæ, nor twelfths. I have found it impossible to ascertain what was the whole number of coins, or the number of each class, but I believe the following list includes the greater part, if not all, of the types of the Cyzicenes.

Nos. 3, 6, 16, 17, 18, 22, 23, 24; [Pl. I., 3, 6, 17, 18, 19, 23, 24, 25]. Nos. 30, 31, 32, 36, 42, 44, 48, 51; [Pl. II., 7, 8, 9, 13, 20, 22, 26, 31]. Nos. 64, 65, 68, 69, 73; [Pl. III., 15, 16, 19, 20, 24]. Nos. 80, 85, 86, 87?, 88, 89, 90, 93, 97, 99; [Pl. IV., 1, 7, 8, 9?, 10, 12, 13, 16, 23, 27]. Nos. 107, 113, 115, 121, 122, 124, 127, 129, 130, 134; [Pl. V., 1, 6, 8, 15, 16, 18, 21, 23, 24, 29]. Nos. 141, 143, 144, 146; [Pl. VI., 3, 5, 6, 8].

The other discovery was made in 1882 at the Piræus, when about forty to forty-five coins appear to have been found in a terra-cotta vase. The principal part were Cyzicene staters, but there were also some staters of Alexander the Great, but no hectæ nor twelfths. I have been unable to obtain a full account either of the number or of the types of the Cyzicenes, but I believe the following is an almost complete list of the types.

Nos. 9, 24; [Pl. I., 9, 25]. Nos. 29, 43, 48, 50; [Pl. II., 6, 21, 26, 29]. Nos. 63, 64, 67, 72, 76; [Pl. III., 14, 15, 18, 23, 28]. Nos. 99*, 100; [Pl. IV., 29]. Nos. 122, 127, 130, 134; [Pl. V., 16, 21, 24, 29]. No. 141; [Pl. VI., 3].

THE FOLLOWING COLLECTIONS ARE REFERRED TO IN AN ABBREVIATED FORM.

British Museum, London—Brit. Mus.	Lt-General Moore, London—Moore.
Bibliothèque Nationale, Paris—Paris.	Lord Ashburnham—Ashburnham.
Bibliothèque Nationale, De Luynes—Paris (De L.).	Mr. Arthur J. Evans, Oxford—Evans.
Koenigliches Museum, Berlin—Berlin.	Rev. William Greenwell, Durham—W. G.
Koenigliche Sammlung, Munich—Munich.	Mr. Carfrae, Edinburgh—Carfrae.
Kaiserliche Sammlung, Vienna—Vienna.	M. W. H. Waddington, Paris—Waddington.
The Imperial Hermitage, St. Petersburg—St. Pet.	The late Baron de Hirsch, Paris—Hirsch.
The Royal Cabinet, Copenhagen—Copenhagen.	Dr. Imhoof-Blumer, Winterthur—Imhoof.
The Royal Cabinet at the Hague—Hague.	M. J. P. Six, Amsterdam—Six.
Public Numismatic Museum, Athens—Athens.	Herr A. Löbbecke, Brunswick—Löbbecke.
Herzoglich	M. Iversen, St. Petersburg—Iversen.
Hunter Coll	Messrs. Rollin and Feuardent, Paris—R. and F.
Leake Coll	M. Hoffmann, Paris—Hoffmann.
Sir Edward Bun-	Professor Rhousopoulos, Athens—Rhousopoulos.
Dr Weber, London—Weber.	M. Lambros, Athens—Lambros.
Mr. Thomas Jones, London—Jones.	

TABLE OF DENOMINATIONS.

No.	Stater.	Hecta.	Twelfth.	No.	Stater.	Hecta.	Twelfth.
1	×			44	×		
2	×			45		×	×
3	×			46		×	
4	×			47		×	
5	×	×		48	×		
6	×			49	×		
7	×			50	×	×	×
8		×		51	×		
9	×			52	×	×	
10	×			53		×	
11	×	×		54	×		×
12	×			55	×		
13	×			56	×	×	
14	×			57	×		
15	×			58	×	×	
16	×			59	×		
17	×			60			×
18	×			61	×		
19	×			62	×		
20	×			63	×	×	
21	×			64	×		
22	×			65	×	×	
23	×	×		66	×		
24	×			67	×		
25	×	×	×	68	×		
26	×	×		69	×		
27	×	×		70	×		
28	×			71	×	×	
29	×			72	×	×	
30	×			73	×	×	
31	×			74	×	×	
32	×	×		75		×	
33	×			76	×		
34	×			77	×	×	×
35	×			78	×	×	
36	×			79	×		
37	×			80	×		
38	×	×		81	×		
39	×			82	×		
40	×			83	×		
41	×	×		84	×		
42	×			85	×		
43	×			86	×	×	×

TABLE OF DENOMINATIONS (*continued*).

No.	Stater.	Hecta.	Twelfth.	No.	Stater.	Hecta.	Twelfth.
87	×			130	×	×	
88	×	×		131	×		
89	×			132	×		
90	×	×		133	×	×	
91	×	×		134	×	×	×
92	×			135	×	×	
93	×	×		136	×	×	×
94	×			137	×		
95	×			138	×	×	×
96	×			139		×	
97	×	×		140	×	×	
98	×	×	×	141	×	×	
99	×	×		142			×
99*	×			143	×	×	
100	×	×	×	144	×		
101		×		145		×	
102	×	×		146	×	×	
103	×			147			
104	×			148	×	×	×
105	×	×	×	149	×		
106	×	×		150		×	
107	×	×	×	151	×		
108	×	×		152	×		
109	×	×	×	153	×		
110	×			154		×	×
111		×		155	×		
112			×	156		×	
113	×	×		157		×	×
114		×		158	×	×	
115	×	×		159			×
116		×		160			×
117	×			161	×		
118	×		×	162		×	
119	×			163	×	×	
120	×	×		164		×	
121	×	×	×	165			×
122	×			166			×
123		×		167		×	
124	×			168		×	×
125	×		×	169	×		
126	×			170	×		
127	×			171	×		
128		×	×	172	×		×
129	×						

CATALOGUE OF TYPES.

1. *Obv.* Tunny upright between two pellets.

Rev. Two incuse squares of different sizes; the larger one containing irregular forms, the other a cray-fish or scorpion.

Brit. Mus., 252 grs. [Pl. I. 1].

Engr. Num. Chron., N.S., vol. xv., Pl. X. 7. Brit. Mus. Guide, Pl. I., 12.

Noted. Nummi Veteres, R. Payne Knight, p. 150.³⁰

The tunny, here the principal type, assumes, as the symbol, badge, or "arms" of Cyzicus, its place on the earliest coinage of the state, a place it retained, though in a subordinate position, as long as Cyzicus continued to issue coins.

The incuse of the reverse is of a quite different form from that afterwards adopted and universally exhibited on the electrum coins of Cyzicus. The figure in one of the squares is probably a cray-fish (*ἄστακός*), a more likely adjunct on the money of a powerful maritime state than a scorpion. A similar creature occurs on coins once attributed to Abydos and later to Ancore, but now assigned by Dr. Imhoof-Blumer (*Monnaies Grecques*, p. 232) to *Astakos*.

This stater, of the Phocaic standard and of good weight, is the earliest coin which can be attributed to Cyzicus, and must be assigned to a period not much, if at all, later than the commencement of the sixth century B.C. It cannot, under any circumstances, be placed after the time when Cræsus introduced his gold coinage (B.C. 560), which, following in the track of his conquests, must to a

³⁰ In future this Catalogue will be cited as Num. Vet., R. P. K.

large extent have displaced the electrum money of the maritime cities of Asia Minor.

The tunny was a symbol of, and sacred to, Aphrodite-Astarte, but it is very doubtful if it is in connection with that goddess that it finds so important a place on the Cyzicene coinage. Except for the fact that all types on Greek money, and especially early ones, are sacred symbols, attached to some divinity, it might be supposed that the value of the fish as an article of trade was the reason why it was adopted as the badge of Cyzicus, in like manner as the silphium was in the Cyrenaica. It may, perhaps, be in a double capacity that both at Cyzicus and in the Cyrenaica these two important articles of commerce were adopted as state badges.

2. *Obv.* Male figure wearing himation over lower part of body, kneeling right on tunny; in his right hand he holds a long sceptre, and on his left an eagle, about to take flight.

Rev. Mill-sail incuse.³¹

Paris (De L.), 245·6 grs. [Pl. I. 2].

Noted. Ann. dell' Inst. di Corrisp. Archeol., xiii., p. 150a.

The figure is undoubtedly that of Zeus, though the kneeling position is one not quite consistent with a representation of the supreme god and father. He is identified by the eagle and sceptre, but in addition the whole figure is characteristic of the powers and attributes it was sought to idealise in a presentment of Zeus. Professor

³¹ In the account of each type any description of the reverse will in future be omitted. It is invariably an incuse of the mill-sail pattern, and differs only in the quarters being sometimes plain, Pl. I., 1 A., at other times covered with dots, Pl. I., 1 B., or with short raised lines. The incuses which have dots or lines appear to be of the later issues.

Gardner (Types of Greek Coins, p. 87), regards the position as simply relative to the requirements of the composition on a limited space, an explanation which will also apply to others of the subjects found on the Cyzicene staters. Though a seated figure of Zeus would have equally well fitted the space at the artist's disposal, it is probable that the subject was in this case accommodated to suit the coin.

On a coin of Trajan is a figure of Zeus, with sceptre and eagle, and having an inscription, ZEY[Σ] ΣΩΤΗΡ ΚΥΖΙΚΗΝΩΝ.

3. Bearded head to right, with ram's ear and horn. Beneath, tunny right.

W. G. (*b*), 248 grs. [Pl. I. 3]. Brit. Mus. (*a*), 247·1. Paris (*c*), 247. Vienna, 247·2. Weber, 247·2 (Whittall sale, 1884, No. 743). Lambros (*a*).
(*a*) same die, (*b*), (*c*), different dies.³²

Engr. Mionnet, Suppl. v., Pl. II. 3. Num. Chron., N.S. xvi., Pl. VIII. 10.

Noted. Brandis, Das Münz-Mass- und Gewichtswesen, p. 408.

Mr. Head (Num. Chron. N.S., xvi., p. 280) believes the head to be of Dionysus Ammon rather than of Zeus Ammon, but there does not appear to be any sufficient reason to separate it from Zeus. On a coin of Macrinus, struck at Cyzicus, together with a laureate head, possibly of the Emperor, is one of Zeus-Ammon (Mionn., Suppl., v. p. 341, No. 385).

4. Bearded head to left, laureate, with ram's ear and horn, hair hanging behind in three long curls. Beneath, tunny left.

³² The letters (*b*) (*c*), &c., designate a die different from that noted (*a*), and also from each other.

Paris (De L.), (a), 247·6 grs. [Pl. I. 4]. St. Pet. (a)
 246·8. W. G. (b), 245·2.
 (a), same die, (b), diff. die.

Engr. Mém. de la Soc. Imp. d'Archéol. (1852), vi.,
 Pl. XXI. 3.

Noted. Brandis, p. 408.

The head on this stater differs much in treatment from that on the last coin, and appears to be of an earlier date. Though the long flowing and curled hair is more in character with Dionysus than with Zeus, there do not appear to be any adequate grounds for attributing it to the former god.

5. Bearded head to left, wearing a wreath of marine plants ;
 behind the neck the head of trident. Beneath,
 tunny left.

Berlin (Prokesch-Osten), 248·7 grs. [Pl. I. 5].

Engr. Revue Numis., N.S. ix., Pl. I. 7.

Hecta. Dupré sale (1869), No. 258.

As might be expected, Poseidon is likely to occur on the coinage of a great maritime state, and several staters will be found to contain the figure of the god, or, as in this case, his head, or some subject connected with him.

6. Bearded figure, kneeling on right knee to right, on tunny.
 On his extended right hand he holds a dolphin,
 and in his left a trident downwards. He wears
 a chlamys, ending in a tassel, which does not
 appear to pass round the neck, but over the left
 shoulder.

Brit. Mus., 247·4 grs. [Pl. I. 6]. One (248·7) noted Num.
 Chron., N.S., xvi., p. 281, No. 9.

Engr. Num. Chron., N.S., xvi., Pl. VIII. 12.



1 A.



1



1 B.



2



3



4



5



6



7



8



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10



11



12



13



14



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16



17



18



19



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21



22



23



24



25



26



Poseidon is frequently represented on vases holding a dolphin, but on one (Lenormant and De Witte, *Élite des Mon. Céram.*, iii., Pl. VIII), he holds a fish, possibly a tunny.

7. Bearded figure, wearing chlamys wrapped round left arm and flying behind, seated right on sea-horse, and striking with a trident, held in right hand. Beneath, tunny right.

St. Pet., 247 grs. [Pl. I. 7]. This stater was found near Kertch.

Engr. Ant. du Bosphore Cimmér., ii., p. 154. Wieseler, *Denkmäler*, ii., Pl. VII. 79.

Poseidon occurs twice on a cylix (671) in the Brit. Mus., wearing chlamys, riding on a sea-horse, and carrying a trident over his shoulder, in one case upwards, in the other downwards. (Lenormant and De Witte, *Élite des Mon. Céram.*, iii., Pt. I., Pl. I. A, and Gerhard, *Griech. Vasenbilder*, Pl. VIII.

8. Bearded figure, half-draped, riding on dolphin, left, and holding a tunny by the tail in right hand.

Paris (De L.), 40·2 grs. [Pl. I. 8].

Though without a trident or any other distinctive characteristic, the figure is probably Poseidon.

9. Youthful male figure, naked, riding on dolphin, left, and holding a tunny by the tail in right hand.

W. G. (a), 245·2 grs., [Pl. I. 9]. Brit. Mus. (b), 247, (Thomas sale, No. 1777). Paris (c), 247.
(a), (b), (c), diff. dies.

Engr. *Mém. de la Soc. Imp. d'Archéol.*, vi. Pl. XXI.

Noted. Mionnet, *Suppl.*, x. p. 228. No. 8. Brandis, p. 405.

The type, a figure of Taras, son of Poseidon, is almost identical with the well-known one of the Tarentine didrachms, from which it differs only in having the tunny in addition. This coin, like others of the staters and as that next to be described, is essentially a copy of a subject occurring on the money of another state.

10. Naked youth on horseback to left; his right arm is stretched out over the head of the horse, which he is about to crown. Beneath, tunny left.

St. Pet., 228·8 grs.³³ [Pl. I. 10].

Engr. Mém. de la Soc. Imp. d'Archéol., vol. vi. (1852), Pl. XXI. 6, described p. 370, No. 10.

Like the last described stater this is a direct copy of one of the common types of Tarentum; not a singular instance, as will be seen in the sequel, where types belonging to Gela, &c., are found on the staters.

11. Bearded human figure naked, the lower part ending in the tail of a fish, reclining in a fronting position, but to the left, on the right arm; the left hand is raised and holds a wreath or ring. Beneath, tunny left.

Brit. Mus. 246 grs. [Pl. I. 11].

Engr. Sestini, Stat. Ant., Pl. V. 15.

Noted. Num. Vet. R. P. K., p. 59. Mionnet, vol. vi., 616, No. 20.

Hecta. Carfrae (*a*), 41 grs. (Dundas sale, No. 21). [Pl. I. 12]. Berlin (two), (Prok.-Ost.), 41·3, another (plated), 31·5. W. G. (*b*), 41·9.
(*a*), (*b*), diff. dies.

Engr. Prokesch-Osten, Inéd. (1854), Pl. IV. 3.

Noted. Brandis, p. 406.

³³ Unless the weight is incorrectly given, this coin is probably plated.

The left hand on the stater is off the flan of the coin, but on the hecta in Mr. Carfrae's collection it distinctly holds a wreath or ring.

The subject is probably Triton, and corresponds to many representations of the son of Poseidon. It is difficult to explain what is held in the left hand, nor do other figures of Triton throw any light upon it.

On a coin wrongly attributed by Combe to Corcyra is a figure of Dagon much like this, holding a trident in his right hand with which he is striking, whilst the left holds up a round object (Museum Hunter., Pl. XIX., No. 12). Dagon is somewhat similarly represented, and holds what looks like a wreath, upon a coin of Aradus (Millingen, Sylloge, p. 81, Pl. IV. 61), and on a coin which M. Six (Num. Chron., N.S., vol. xviii. p. 125, Pl. VI. 3), is inclined to attribute to Azotus, he holds a trident in his right hand and a wreath in his left. On the coins of Itanus the figure which ends in a fish tail, and is not unlike that on the staters, is called by Mr. Wroth, though with a query, Glaucus. (Brit. Mus. Cat. of Cretan Coins, p. 51, Pl. XIII. 1, 2, 3).

12. Female head to left, wearing a veil with corn-wreath over it, the ears of corn projecting in front. Beneath, tunny left.

Paris (De L.) (a), 246.9 grs., [Pl. I. 13]. Brit. Mus. (b), 247.4, (Thomas sale, No. 1778, Northwick, No. 958). Paris, 246.9.
(a), (b), diff. dies.

Engr. Rev. Num. N.S., vol. i. Pl. II. 9. Brit. Mus. Guide, Pl. XVIII. 7. Gardner, Types of Greek Coins, Pl. X. 41.

This beautiful head of Demeter belongs to the later

series of electrum coins of Cyzicus, and may, perhaps, be classed to the second quarter of the fourth century B.C.

The goddess has here the mature expression of the mother, with all the soft and gentle character of one so intimately connected with the productive gifts of nature. A somewhat similar but more youthful and virgin-like head of Cora, with the title **ΣΩΤΕΙΡΑ**, is found on the tetradrachms of Cyzicus. That the head is of Cora appears to be shown by a coin of Imperial times which has upon it a youthful head and the legend **ΚΟΡΗ ΣΩΤΕΙΡΑ ΚΥΖΙΚΗΝΩΝ**.

13. Female head facing, but slightly inclining to left, with corn-leaves and ears wreathed in the hair, and wearing a veil and plain necklace. Beneath, tunny left.

Paris, 248·5 grs., [Pl. I. 14].

Engr. Head, Hist. Num., Fig. 272.

This head of Demeter, like that on the last described stater, belongs to the later series of the Cyzicenes. It was copied on coins of Tyra in Sarmatia, which have on the reverse a bull butting; also a type which occurs on the staters of Cyzicus.

14. Female figure, apparently half-length, to right, wearing long chiton, and holding in each hand a lighted torch, behind her a poppy. Beneath, tunny right.

Hirsch, 248 grs., [Pl. I. 15].

Engr. D'Alexéieff, Dissertation sur une monnaie inédite, Pl. Fig. 7. Paris, 1876.

The figure is Demeter, as is indicated by the torches and the poppy. The coin unfortunately is in poor condition, and it is, therefore, impossible to decide with certainty as to the attitude. She does not seem to be represented as standing, but rather as if sinking into the ground. If this supposition is correct, she appears as on her way in pursuit of Persephone to the lower world.

As Cyzicus was one of the places which claimed to be the scene of the rape of Persephone, it might be expected that Demeter would be represented on the coinage of the city.

15. Female figure, wearing long chiton and peplos, kneeling right on tunny; she holds a long torch (?) in her right hand.

Paris (De L.), 245·2 grs. [Pl. I. 16]. St. Pet. 245·3.
Both same die.

Engr. Ant. de Bosph. Cimmér, vol. ii. p. 154. Rev. Num., N.S., vol. i., Pl. II. 8.

Noted. Brandis, p. 407.

The stater in the collection at the Hermitage was found near Kertch.

The object held in the right hand of the figure is doubtful. If, however, it is a torch, which appears probable, Demeter is represented.

16. Youthful figure right, wearing himation over the back, the breast and arms bare, holding two plants of corn in left hand, and carried in chariot drawn by two winged serpents. Beneath, tunny right.

W. G. (a), 246·9 grs. [Pl. I. 17]. Brit. Mus. (b), 247·6.
Paris (De L.), (a), 247. Carfrae (a), 246·3.
(a), (b), diff. dies.

Engr. Rev. Num., N.S. i., Pl. II. 7.

Noted. Num. Vet., R. P. K., p. 31. Num. Chron., vi., p. 150. Brandis, p. 405.

There is no appearance of the chariot, though part of one wheel is visible beneath the wing of the serpent. This is, no doubt, due to the requirements of the coin. To have represented the chariot would have overcrowded the subject and detrimented the composition.

If the figure be female it is Demeter, and in the act of pursuing Hades when carrying off Persephone. The fullness of the breast is maternal, and the attitude, the right hand placed on the wing of the serpent, and the haste displayed, point to a mother's anxiety and her desire for the recovery of her child. Upon many of the Imperial coins of Cyzicus Demeter occurs, carried in a car drawn by serpents, and holding two torches.

The subject, however, with much more probability, represents Triptolemus starting on his beneficent mission, as the bestower of corn and fruits and the instructor of mankind in their cultivation. A very similar figure, though he there holds a sceptre, is shown on a cylix, figured in vol. iii. Pl. XLVI. of Lenormant and De Witte, *Élite des Mon. Céram.* The subject is not an uncommon one on vases.

The type, like others on the coins of Cyzicus, is probably due to the close relations between that state and Athens, where Demeter and the cycle connected with her were among the most ancient and intimate of its cults. A bronze coin of Eleusis—and there is a similar one of Athens—has a representation of Triptolemus quite like that of the stater, the car, however, being clearly shown. (Inhoof-Blumer, *Monn. Grecq.*, p. 153, No. 101, Pl. C. No. 29. Overbeck, *Griech. Kunst-Mythol.*, iii. p. 581; *Münztafel*, Pl. IX. No. 3).

17. Youthful male head, wearing laurel wreath, nearly full-face, but inclining to the right. Beneath, tunny right.

W. G. (a), 247·1 grs., [Pl. I. 18]. Brit. Mus. (b), 247·9. Paris (De L.), (b). Waddington, 246·8. Carfrae (a), 247·2 (Whittall sale, 1884, No. 739). Lambros in 1885.

(a), (b), diff. dies.

Engr. Waddington, *Asie Mineure*, Pl. VIII. 3. *Rev.* Num. xvii., Pl. V. 3. Num. Chron., N.S., xvi., Pl. VIII. 2.

A head of Apollo, who as the father of Cyzicus, the mythical founder of the city, and in other relations, was a favoured deity there.

18. Naked male figure, wearing wreath, kneeling right on tunny; his right arm hangs down his side, and in his left he holds a strung bow, and appears to be watching the effect of an arrow he has just discharged.

W. G. (a), 247·8 grs. (Bompois sale, No. 1872), [Pl. I. 19].
 Brit. Mus. (b), 247·8. Berlin, 247.
 (a), (b), diff. dies.

Engr. Num. Chron., N.S., xvi., Pl. VIII. 4. Bompois Cat., Pl. V.

Noted. Königl. Münz-Kab. (1879), No. 100.

The figure of Apollo on the stater is probably copied from a group of which it formed a part. He is represented either as the destroyer of Python (as seen on a coin of Croton) or as shooting at the children of Niobe. The latter is the opinion of M. Six (Num. Chron., N.S., xvii., p. 170), who thinks the subject of Niobe and her children formed the central one on the front of a temple, and that kneeling figures of Apollo and Artemis occupied the two sides. He refers to a coin of Erchomenus in Arcadia (Num. Chron., N.S., xiii., Pl. V. 1), on which Artemis appears on one face and Niobe and one of her children on the other. By others the figures on the reverse are considered to be Callisto and Arcas.

A figure of Apollo, almost identical with that on the stater, occurs upon a small silver coin of Sicyon.

19. Figure wearing long chiton with sleeves, seated right on omphalos, holding a lyre in left hand; the right, which hangs down, holds an indefinite object, possibly a plectrum. Beneath, tunny right.

Berlin (Prok.-Ost.), 248.2 grs. [Pl. I. 20].

Engl. Rev. Num., N.S., ix., Pl. I. 8.

Though wearing a sleeved chiton, this is undoubtedly Apollo, to whom M. Lenormant attributes it (*Rev. Num.*, N.S., ix., p. 13). There is no wreath apparent on the stater, but this may be due to imperfect striking. On a coin of Delphi the god is clothed in the same way. On silver coins of Cyzicus Apollo is represented on the omphalos, and holding a lyre, but naked to the waist, and wearing a wreath. On a half obol of Sicyon, Apollo, holding a lyre, is seated on what has been usually called a rock, but which is probably the omphalos. The type on the preceding stater also corresponds with that on another half obol of Sicyon.

20. Male figure, laureate, wearing peplos over knees, seated sideways, but with head turned to left, on griffin to right; in his right hand he holds a laurel bough. Beneath, tunny right.

Evans, 244.8 grs. [Pl. I. 21].

This stater was found near Kertch.

The Hyperborean Apollo, on his way to the country where the griffins had charge of the gold, of which Herodotus (iii. 116) gives an account. Although Apollo occurs on several of the Cyzicene electrum coins, and is very fully represented on the silver money of the state, such a subject as the present one was most appropriate, for it is certain that much of the gold used for the currency was obtained, through Panticapæum, from the Ural Mountains, the locality indicated by the griffin-guarded land of Apollo.

A similar subject, but where Apollo holds a lyre in the left hand, occurs on a cylix in the Imperial Museum at Vienna. (Lenormant and De Witte, *Élite des Mon. Céram.* vol. ii. Pl. V). The same is to be found on a coin of Trebonianus Gallus, struck at Alexandria Troas. (Mionnet, *Suppl.*, vol. v. p. 541, No. 300). On a vase at Berlin Apollo is seated on a griffin, holding a laurel bough, but is clothed in a himation and wears buskins, as if equipped for a journey, probably to the Hyperborean regions (Lenormant and De Witte, *l.c.*, vol. ii. Pl. XLIV). And on a vase in the Brit. Mus. (E. 694) he is represented on a griffin, laureate, and carrying a laurel bough, but only wearing peplos over his knees.

21. Figure seated sideways on swan, but with head turned to left, wearing peplos over knees. Beneath, tunny left.

Paris (De L.), 247 grs. [Pl. I. 22]. St. Pet., 250·5.
Both same die.

Engr. Rev. de la Numis. Belg., vol. ii. Pl. V. 1.

Noted. Ant. du Bosph. Cimmér., vol. ii., p. 155. Brandis, p. 407.

The stater at the Hermitage was found near Kertch.

It is difficult to decide with certainty as to the sex of the figure. If female, it must be Aphrodite. On coins of Camarina, where a somewhat similar representation is found, the way in which the peplos is treated as a sail gives a more graceful character to the subject. The nymph Camarina, and not Aphrodite, is represented on the Sicilian coin.

The figure, however, is almost certainly male, and represents Apollo carried on a swan to Delos. Callimachus in his Hymn to Apollo says,

———ἐπένευσεν ὁ Δῆλιος ἡδὺ τι φοῖνιξ
Ἐξαπίνης ὁ δὲ κύκνος ἐν ἥερι καλὸν αἶδει.

De Koehne (*Ant. du Bosph. Cimmér.*, vol. ii. p. 155), referring to the stater found near Kertch, calls the figure Apollo, and attributes it to Chalcedon.

On a vase once in the Hamilton Collection, Apollo is represented wearing himation and buskins, seated on a swan, and holding a lyre. (*Lenormant and De Witte, Élite des Mon. Céram.* vol. ii., Pl. XLII).

The representation on a vase in the Brit. Mus. (E. 240), where Apollo is without a lyre, and holds a laurel bough, is more like that on the stater.

22. The Omphalos, with fillets suspended from the top; on each side is seated an eagle, with closed wings, the one facing the other. Beneath, tunny right.

Imhoof (*a*), 245·8 grs. [Pl. I. 23]. Brit. Mus. (*a*), 248. Copenhagen. W. G. (*a*), 248·5. Bunbury. Weber, 247·5. Jones. Lewis. Six, 248·2. Rhousopoulos. Lambros.
(*a*) same die.

Engr. Num. Chron., N.S., xvi., Pl. VIII. 6. Brit. Mus. Guide, Pl. X. 12. Bompis Cat., Pl. V.

The Omphalos at Delphi, where was situated the great oracle of Apollo. The representation here probably alludes, as Mr. Head suggests (*Num. Chron.*, N.S., xvi., p. 279), to the worship of the god in general, and as typical of the Apolline cult throughout Hellas. At the same time Cyzicus had, through its reputed founder, a very intimate connection with Apollo.

The golden eagles of Zeus at Delphi are mentioned by Pindar (*Pyth.*, iv. 4) in reference to the oracle,

ἐνθα ποτὲ χρυσέων Διὸς αἰητῶν πάρεδρος.

The scholiasts connect these images with the legend that Zeus sent forth one eagle from the east and another from the west to find the centre of the world, and that they met at the oracle of Delphi.

23. Helios, naked, radiate, kneeling right on tunny, holding by the bridle two horses, prancing in opposite directions.

W. G. (*a*), 247·8 grs. [Pl. I. 24]. Brit. Mus. (*b*), 248·4. Berlin, 247·4. Weber, 247·8. Hirsch (*c*), 247. Lambros in 1885.
(*a*), (*b*), (*c*), diff. dies.

Engr. Num. Chron., N.S., xvi., Pl. VIII. 5. Gardner, Types, Pl. X. 3.

Hecta. Brit. Mus., 40·2 grs.

Noted. Brandis, p. 407.

The Sun God appears on the stater radiate, as on coins of Rhodes. He was worshipped at Zeleia, a town on the river Aesepus, and neighbouring to Cyzicus, as Helios (Marquardt, *Cyzicus und sein Gebiet*, p. 129), and probably also at Cyzicus itself.

The subject, as here represented, is very gracefully composed, and has probably, as is suggested by M. Six (Num. Chron., N.S. xvii., p. 170), been copied from a metope of a temple. He observes, "La composition est parfaitement carrée." It has, however, been accommodated to suit the requirements of the size and shape of the coin flan, a mode of procedure not uncommon with the artist die-engravers of Cyzicus.

Representations of Helios with the chariot are not infrequent upon vases (Lenormant and De Witte, *Élite des Mon. Céram.*, vol. ii. Pl. CXI., CXII.A., CXIII.).

24. Young male head to left, with stag's horn. Beneath, tunny left.

Athens (*a*), 247·9 grs. [Pl. I. 25]. W. G. (*a*), 246·8 (Whittall sale, 1884, No. 747), [Pl. I. 26]. Brit. Mus. (*b*), 247·1.

(*a*), (*b*), diff. dies.

Engr. Num. Chron., N.S. xvi., Pl. VIII. 19.

Noted. Num. Vet., R. P. K. p. 126.

The head of Actæon, and connected with the worship of Artemis. It is the only coin subject having relation to the goddess which has up to the present time been found on the staters, though she was worshipped in a temple not far from Cyzicus, at a place where there were hot springs. This seems to be the only instance where Actæon is represented upon a Greek coin. He appears on vases as a youth, with stag's horns sprouting from his forehead, and being attacked by his dogs (Lenormant and De Witte, *Élite des Mon. Céram.*, vol. ii. Pl. C, CI, CIII).

25. Female head to left, wearing crested helmet with cheek-pieces; the socket for the crest is ornamented with a zigzag pattern and dots, similar to that on the early tetradrachms of Athens. The hair, which hangs down beneath the back of the helmet, is represented by dots. Beneath, tunny left.

W. G. (*a*), 248·2 grs. (Bompois sale, No. 1369), [Pl. II. 1]. Brit. Mus. (*a*), 247. Weber (*a*), 246·5. Imhoof (*a*), 249·9. Hoffmann, 247·4.

(*a*) same die.

Engr. Imhoof-Blumer, *Choix*, Pl. III, 99. Head, *Hist. Num.* Fig. 271.

Noted. Imhoof-Blumer, *Monn. Grecq.*, p. 241, No. 67.

Hecta. Brit. Mus. (*a*), 40·8 grs. Vienna (two), 40 (*b*), 42·6. Berlin (*c*), 40·6. Athens, 41·2. W. G. (*d*), 41·4.

(*a*), (*b*), (*c*), (*d*), diff. dies.

Twelfth. Paris (De L.).

Engr. De Luynes, *Choix*, Pl. X, 13.

The head of Pallas is a type which occurs at various periods on the Cyzicene staters. This coin is archaic, and is probably not later than B.C. 500; others belong to a time when Greek art was at its height. It is possible that in these representations a part of the goddess may stand for the whole, and that the head is intended for Pallas herself. If this supposition is true we may have here one portion of a group, other parts of which are found on other coins, as, for instance, in the subject of Gaia, Erichthonius, and Cecrops, in which Pallas was a principal actor. A coin of Agrigentum, which has on one face the head of an eagle, and on the other a crab's claw, affords a good example where part of a type is put for the whole.

That Pallas, the goddess of Athens, should occupy a prominent place in the coinage of Cyzicus, is only what might be expected when the long and intimate relationship between the two states is taken into consideration. Several types having reference to Athens will be found to occur on the staters.

26. Female head to left, wearing a plain Corinthian helmet, the hair behind hanging in a square mass, and represented by dots. Behind, tunny downwards.

Imhoof (*a*), 248·7 grs. [Pl. II. 2]. Brit. Mus., 249·6. Vienna (*b*), 239·3. Weber (*c*), 249·1. W. G. (*c*), 248·2. Lambros in 1885.

(*a*), (*b*), (*c*), diff. dies.

Hecta. Munich, 40·8 grs. The Hague.

Engr. Sestini, Stat. Ant., Pl. VI. 15.

Noted. Mionnet, Suppl. v., p. 370, No. 549.

An archaic coin, and probably a head of Pallas.

27. Female head to left, wearing crested helmet. Behind, tunny upwards.

St. Pet., 246·9 grs. [Pl. II. 3].

Hecta. Six, 41 grs. [Pl. II. 4].

Both the stater and hecta are in very poor condition, and it is therefore difficult to make out the form of the helmet. The head is probably of Pallas.

28. Female head to left, wearing crested Corinthian helmet, hair in a long roll behind. Beneath, tunny left.

Paris (De L.) (*a*), 247 grs. [Pl. II. 5]. Brit. Mus. (*b*), 246·8 (Thomas sale, No. 1779; Loscomb sale, No. 575). Berlin (Fox), 246·9. St. Pet. (two), 247·2 (*c*), 247·3 (*d*).
(*a*), (*b*), (*c*), (*d*), diff. dies.

Engr. Mém. de la Soc. Imp. d'Archéol, vol. vi., Pl. XXI. 4.
Fox, Unpubl. Coins, II., No. 25.

Noted. Brandis, p. 409.

Again a head of Pallas.

29. Female head, nearly full face, but inclining to right, wearing helmet with three crests. Beneath, tunny right.

Paris (De L.) (*a*), 247·2 grs. [Pl. II. 6]. Berlin (*b*), 247. Athens (*b*), 248·1. W. G. (*a*), 247·1. Weber (*b*), 245·9. (Bompois sale, No. 1370).
(*a*), (*b*), diff. dies.

Noted. Königl. Münz-Kab., 1877, No. 99.

Still a head of Pallas.

30. Beardless head, full-faced, without neck, wearing a helmet with a crest which has the appearance of an inverted crescent, with a row of dots upon the lower part of crest. Beneath, tunny left.

W. G. (*a*), 245·1 grs. (Whittall sale, 1884, No. 756), [Pl. II. 7]. Paris (*b*), 247.
(*a*), (*b*), diff. dies.

Engr. Mionnet, Suppl., v. p. 301. No. 109, Pl. II. 5.

Noted. Brandis, p. 408.

The crescent-like object upon the head appears to be the crest of a helmet, and the line of dots favours that view. The head, without any neck and with peculiar projecting ears, scarcely appears like that of Pallas, and is somewhat Gorgon-like. It possibly may be a Gorgon head, and wearing, in connection with Pallas, the helmet of that goddess. The way in which the crest is represented may be the result of an inability to show it in perspective, for such a representation would require the face to be turned a little on one side. A parallel instance is found in the way in which the eye is placed, as if seen in front, upon a face seen in profile.

81. Female figure to right, wearing sleeveless chiton ; she is rising through the ground, and holds in her outstretched arms a child, as if presenting it to someone. The child is naked, except that it wears a belt, with bullæ attached, which passes over the left shoulder and under the right arm. Beneath, tunny right.

W. G., 247·5 grs. (Bompois sale, No. 1378), [Pl. II. 8].
 Brit. Mus., 247·5. (Whittall sale, 1884, No. 755).
 Both same die.

Engr. Head, Hist. Num. Fig. 277.

The representation is of Gaia giving Erichthonius into the hands of Athena, and is a portion of a group, the original of which was probably in marble. The figure of Cecrops on the stater next to be described formed another portion of the subject, to complete which Athena is wanting. No coin has yet come to light which gives the figure of the goddess, but there probably was one, unless she is represented by a coin bearing her head, as already suggested. The group from which the subjects of these two staters were taken, must have borne a strong likeness to a terra-cotta at Berlin (*Archæol. Zeitung*, 1872, p. 51, Pl.

LXIII), and though there are some slight variations, it is probable that the terra-cotta and the prototype of the staters were both copied from a common and well-known piece of Attic sculpture.

The crepundia which Erichthonius wears may be seen on the alliance coins of Samos, Ephesus, &c., which have the type of Heracles strangling the serpents, and also on a gold stater of Lampsacus.

The subject is found upon vases. See Lenormant and De Witte, *Élite des Mon. Céram.*, vol. i. Pl. LXXXIV., LXXXV. On a hydria in the British Museum (E. 197), the birth of Erichthonius is represented, the figures there being a nymph, Zeus, Gaia holding the child, Athena, and Nike.

32. Bearded figure to left, the body ending in a serpent's tail ; in his right hand he holds a branch of a tree, upright. Beneath, tunny left.

Imhoof (*a*), 248·7 grs. [Pl. II. 9]. Brit. Mus. (*b*), 246·8, [Pl. II. 10]. Berlin, 247·6. St. Pet. (*a*), 247·7. W. G. (*a*), 248·1. (Whittall sale, 1884, No. 744). Jones. Lambros, 249.
(*a*), (*b*), diff. dies.

Engr. Num. Chron., N.S., xvi., Pl. VIII. 14, 15. *Zeitschr. für Numis.*, vi. p. 16 (woodcut). Brit. Mus. Guide, Pl. X. 14. Gardner, Types, Pl. X. 1.

Hecta. Paris.

Mr. Head (Num. Chron., N.S., xvi., p. 281) attributed the figure to one of the giants of Mount Dindymus, who attacked the ships when the Argonauts had ascended the mountain. There is no doubt, however, as M. Six has suggested in a letter to Mr. Head, printed l. c. xvii. p. 169, that it represents Cecrops, and is part of a group where Gaia is presenting Erichthonius to Athena. The serpent, in allusion to his autochthonous, earth-born ori-



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gin, is a frequent adjunct of Cecrops, and in the present instance forms a portion of his body :—

ὦ Κέκροψ ἦρως ἀναξ, τὰ πρὸς ποδῶν δρακοντίδῃ. Aristoph. Vesp., 438.

The branch he holds is from the olive-tree on the hill of the Acropolis, planted by Athena, and by which she established her right to the country in the dispute with Poseidon.

Cecrops is represented ending in a serpent's tail and holding an olive-branch, on a vase. (Lenormant and De Witte, *Élite des Mon. Céram.*, vol. i. Pl. LXXXV. A.).

A very similar treatment to that in the group from which the type of this and the preceding coin seem to have been taken, is found on a crater (Mon. Ined. dell' Inst., vol. iii. Pl. XXX). Hephæstus is, however, present. On a cylix (l. c. vol. x. Pl. XXXIX), there is a group somewhat like the last, but where, in addition to Hephæstus, Herse also is present. On both of these vases Cecrops is represented ending in a serpent's tail. A rhyton in the British Museum (E. 471), has a figure of Cecrops with a serpent's tail, and holding a sceptre and a patera, into which a winged figure is about to pour a libation. Erichthonius, who is seated on a rock, appears as a youth wrapped in a mantle.

83. Female head to left, wearing stephane and earring. Beneath, tunny left.

Paris (a), 245·5 grs. [Pl. II. 11]. Brit. Mus. (b), 246·3, (Thomas sale, No. 1777). St. Pet. (b), 245·5.
(a), (b), diff. dies.

Engr. Brit. Mus. Guide, Pl. XVIII. 6.

Noted. Brandis, p. 408.

Probably a head of Aphrodite, and one of the later staters of Cyzicus, not earlier perhaps than the second quarter of the fourth century B.C.

84. Female figure standing facing, but inclining to left; she is naked to the waist, and holds up her dress with her right hand, the left apparently resting on a column, in front of which stands a naked youthful winged figure facing, the right arm raised and the legs crossed. Beneath, tunny left.

Paris, 247 grs. [Pl. II. 12].

Noted. Brandis, p. 407.

Aphrodite and Eros. The composition is one of great gracefulness, and is very skilfully balanced. The pose of the figures and their varied and appropriate attitudes are rendered in a very charming way. It was probably copied from a larger group in marble, a work of celebrity and by a great sculptor.

35. Head of Hermes to left, wearing petasus. Beneath, tunny left.

Waddington, 245·7 grs. (Ivanoff sale, No. 190).

This is almost the only type on a stater or its parts that I am acquainted with, of which I am unable to give a representation.

No other coin of Cyzicus bearing a subject connected with Hermes is known to me, unless those with a goat or goat's head may be considered as belonging to his cult.

36. Bearded head to right, wearing diadem (the mitra), and having an ivy wreath above and beneath it. Beneath, tunny right.

W. G. (a), 246·2 grs. (Bompois sale, No. 1367), [Pl. II. 13]. Brit. Mus. (b), 244·7. Paris (a), 246·3. One engraved Num. Chron., N.S. Pl. VIII. 8 (a), 246·2.

(a), (b), diff. dies.

Engr. Num. Chron., N.S., xvi., Pl. VIII. 7, 8.

Noted. Brandis, p. 408.

Head of Dionysus, as noble in expression as it is beautifully executed. The god is here presented as manifesting the strength and repose of nature, not as when she appears in the activity and tumult of production, but when she has provided all that sustains and gladdens the life of man, and rests, though without fatigue, from her labour.

It may be contrasted, and much to its advantage, with the head of the god on the coins of the Sicilian Naxos, which, beautiful as it is, does not possess the calm dignity of the Cyzicene picture. It may be compared with the head on the tetradrachms and drachms of Thasus, which for breadth of treatment and majestic quietness with strength, is not surpassed by any head in the whole Greek coin series.

37. Youthful head to left, wearing ivy wreath, with bunches of berries in front; hair long and flowing. Beneath, tunny left.

Imhoof (*a*), 248·6 grs. [Pl. II. 14]. Paris (*b*), 247·7. Berlin (two), (Prok.-Ost.) (*a*), 247·8, (Fox), 247·6.

(*a*), (*b*), diff. dies.

Engr. Rev. Num., N.S. ix., Pl. I. 5.

Noted. Brandis, p. 408. Königl. Münz-Kab. (1877), No. 106.

The head is very feminine, and though probably of young Dionysus, may be of a Dionysiac female, a Mænad.

38. Youthful male figure, wearing himation over the knees, and fillet, the ends of which hang low and are seen in front of and behind the head. He is seated left on a rock, which is covered with a panther's skin, the paws being visible beneath the tunny. He holds a cantharus in his right hand, and his left arm rests on the rock behind him. The head of the thyrsus, with pine-cone and tania, projects in front of his knees. Beneath, tunny left.

Paris (De L.) (a), 247 grs. [Pl. II. 15]. Brit. Mus.
 (b), 245·2, [Pl. II. 16]. Paris (a), 246·2.
 Berlin (two), 245·8, 244·7. St. Pet., 247.
 Bunbury (Whittall sale, 1869, No. 39). Imhoof
 (c), 247.
 (a), (b), (c), diff. dies.

Engr. Brit. Mus. Guide, Pl. XVIII. 5.

Noted. Brandis, p. 406. Königl. Münz-Kab. (1877),
 No. 102.

Hecta. Six, 39 grs.

Engr. Dumersan, Cat. Allier, Pl. XII. 5.

Noted. Mionnet, Suppl., v. p. 303, No. 121.

Dionysus is here figured youthful and beardless. He reclines in an attitude almost of languor, with limbs softly though fully moulded, and with even a feminine character, not inconsistent with the dimorphic attributes of the god. The panther's skin, the thyrsus and wine-cup, all fit in with the richly developed form, and are in closest harmony with the divinity in whom the wealth of a bounteous and genial nature was most fully expressed.

The coin is probably a copy from a sculpture on the pediment of a temple, and reminds us of the Heracles of Croton, which strikingly recalls the pedimental Theseus (so-called) of the Parthenon.

39. Youthful figure, naked, seated facing on tunny left; he wears a wreath of ivy and holds the thyrsus with pine-cone head and tænia in his left hand; the right hand is off the coin, but it possibly held a cantharus.

Paris, 248·5 grs. [Pl. II. 17].

Dionysus appears here as a child, almost an infant, but the nascent power of the god is shown in the firm pose of

the figure and the decision with which he grasps the thyrsus.

40. Bearded head to left, with animal ears, and wreathed with ivy. Beneath, tunny left.

Berlin (Prok.-Ost.), 247·6 grs. [Pl. II. 18].

Engr. Rev. Num., N.S. ix., Pl. I. 3.

Noted. Königl. Münz-Kab. (1877), No. 107.

The head is of Pan, and but for the difference in the form of the leaves of the wreath, is almost identical with that on some of the gold coins of Panticapæum. The head of a member of the Dionysiac cycle would fitly appear on the coins of Cyzicus, but in addition, on account of the constant commercial relations between the two cities, the principal divinity of Panticapæum found a very appropriate place on a Cyzicene stater.

41. Bearded satyr with pointed ears and long and thick tail, kneeling to left, holds a tunny by the tail in his right hand, the left rests on his hip; hair represented by dots.

Imhoof (*a*), 248·6 grs. [Pl. II. 19]. Vienna (*b*), 247·4. W. G. (*b*), 249. Weber (*b*), 248·8. Hirsch (*b*), 247.

(*a*), (*b*), diff. dies.

Engr. Head, Hist. Num. Fig. 275.

Hecta. Paris (two), (De L.), 41·6 grs., 41·8. Leake, 41·4.

Noted. Leake, Num. Hell. Suppl. p. 44.

One of the earlier staters. Satyrs, as part of the Dionysiac cycle, might be expected to occur on coins of Cyzicus, and we shall accordingly find them on the staters under several different aspects. The characteristic features and form of these ignoble attendants upon Dionysus are well represented on the present coin, in the coarse and fleshy nose and lips, as well as in the strongly formed but ungraceful limbs.

42. Bearded satyr, with tail and animal ears, kneeling to right on tunny; he holds a cantharus in his right hand into which he is pouring wine from an amphora, held on his left arm.

W. G. (a), 247·8 grs. [Pl. II. 20]. Brit. Mus. (b), 248. St. Pet., 245·7. Waddington, 246·7. Weber, 247·1. (Bompois sale, No. 1374). Carfræ, 247·8. Hoffmann. Lambros.

(a), (b), diff. dies.

Engl. Num. Chron., N.S. xvi., Pl. VIII. 9, vol. xx. Pl. I. 8. Head, *Hist. Num.* Fig. 274.

A subject which, with many others, belongs to the cycle of Dionysus, who himself is more than once depicted on the staters. Mr. Head (*Num. Chron.*, N.S. xvi., p. 280) reminds us that Cyzicus was renowned for its wines, and quotes the line,

Κύζικ' ὃ δεικνύειρα Προποντίδος δεινοπόλοιο.

43. Satyr, with tail and animal ears, kneeling left on tunny, is drinking from an amphora which he holds up to his mouth with both hands; a wavy line depends from the amphora.

W. G. 247·1 grs. [Pl. II. 21]. Collection at Athens. Both found at the Piræus with others in 1882, and both from the same die.

The amphora has the appearance of being broken at the neck, and certainly there is not room for it between the body of the vessel and the lips of the satyr. Such a representation would be a most unusual, not to say unlikely one; but it seems as if, in his eagerness to get the sooner at the wine, the satyr had broken off the mouth of the amphora. If this supposition can be entertained, the waved line may be a stream of wine escaping the lips of the too greedy drinker. On many vases where wine is being poured into a vessel and is being spilt in

the operation or overflows, the appearance is much like that on the stater.

44. Bearded satyr seated right, holding a flute (?) in each hand. Beneath, tunny right.

Brit. Mus. 247·9 grs. [Pl. II. 22]. Waddington, 247·2.

Engr. Num. Chron., N.S. xvi., Pl. VIII. 20.

The object held in the satyr's left hand has also been supposed to be an idol.

45. Satyric mask, tongue protruding. On either side, a tunny upwards.

Paris, 41 grs. [Pl. II. 23]. W. G., 41·1.

Different dies.

Engr. Mionnet, Suppl., vol. ix., p. 228, No. 7. Pl. X. 3.

Twelfth. Munich, 20·5 grs.

Engr. Sestini, Stat. Ant. Pl. VI. 18.

Noted. Mionnet, vi. p. 620, No. 52. Suppl. v. p. 370, No. 551.

46. Centaur galloping left, with head turned back, holding a branch with both hands. Beneath, tunny left.

Paris (a), 40·7 grs. [Pl. II. 24]. Munich (a), 41. Hague.

St. Pet. (a). Imhoof (b), 39·8. Six (c), 35·8.

(a), (b), (c), diff. dies.

Engr. Sestini, Stat. Ant., Pl. V. 17, 18. Mionnet, Pl. XLIII. 9. Dumersan, Cat. Allier, Pl. XII. 4.

Centaurs formed a part of the Dionysiac cycle; but as represented here, armed and in conflict, probably with the Lapithæ, some other connection may perhaps be looked for, and possibly in association with Heracles. Another motive may, however, be suggested. Jason was brought up by the Centaur Cheiron, and this type may originate, like others, in the Argonautic expedition.

47. Bifrontal head, male to right, female to left. Beneath, tunny.

W. G., 40·9 grs. [Pl. II. 25]. St. Pet., 41·4.

Diff. dies.

The heads are those of a Satyr and Nymph. In the *Inst. di Corr. Arch. Annali*, 1858, Tav. d' Agg., is published a bifrontal vase, with heads of a Satyr and Nymph, back to back, with a memoir by De Witte.

48. Female figure, wearing long chiton, seated left on dolphin; she holds a wreath in her right hand, and carries a shield with a star upon it on her left arm. Beneath, tunny left.

W. G. (a), 247·4 grs. (Whittall sale, 1884, No. 749), [Pl. II. 26]. Weber (a), 248·7 (sale at Sotheby and Wilkinson's, Feb. 19, 1877, No. 78), [Pl. II. 27]. Brit. Mus. (a), 247·6 (Thomas sale, No. 1775). Paris (b), 247·6. Hoffmann (a), 247·9. Lambros in 1885.

(a), (b), diff. dies.

Engr. *Mém. de la Soc. Imp. d'Archéol.*, vol. vi. (1852), Pl. XXI. 5. *Num. Chron.*, N.S., xvi., Pl. VIII. 22. *Brit. Mus. Guide*, Pl. XVIII. 4.

M. de Koehne (l. c., p. 376), who first published the stater, considers the figure to be of Thetis, carrying the shield forged by Hephæstus and a wreath to Achilles, the vanquisher of Hector. It is more probable that it represents a Nereid, and that the coin was struck after a naval victory. The date, judging by the style and fabric, may well be about B.C. 410, and it quite possibly may have commemorated the victory gained by the Athenians under Alcibiades over the Spartan fleet, off Cyzicus, in that year, at which time the city was under Athenian hegemony. Upon a stater of Lampsacus, in the collection in the *Bibliothèque*, Paris, is a very similar figure, though

having some slight variations. (Sestini, *Stat. Ant.*, Pl. VI. 13.)

49. Female figure, naked, to left, her hair tied in a knot at the back of head; two dogs' heads issue from her shoulder, and she ends in the tail of a fish; in her right hand she holds a tunny. Beneath, tunny left.

St. Pet., 246·9 grs. [Pl. II. 28].

Engr. Mém. de la Soc. Imp. d'Archéol., vol. vi., Pl. XXI. 7.

Scylla, and as usually represented. This type is only found elsewhere upon coins of Italy and Sicily, and then merely as an ornament or adjunct, except on a coin of Cumæ. A celebrated Cyzicene painter, Androcydes, a rival of Zeuxis, was known for having produced as one of his best works a picture of Scylla.

50. Bearded human-headed bull, with horns, face fronting, standing left on tunny.

Athens, 245 grs. [Pl. II. 29].

Hecta. Munich, 40·9 grs. [Pl. II. 30].

Twelfth. Athens, 20 grs.

The symbolic representation of a river-god, and possibly of the river Aesepus.

51. Forepart of human-headed bull, with beard and horns, swimming to right. Behind, tunny upwards.

Brit. Mus. (a), 246·5 grs. [Pl. II. 31]. Paris (b). Berlin (Fox), 247·4. W. G. (a), 247 grs. (Whittall sale, 1884, No. 748). Leake, 247·4.
(a), (b), diff. dies.

Engr. Rev. de la Numis. Belg., ii. Pl. V. 2. Num. Chron., N.S., xvi., Pl. VIII. 21. Brit. Mus. Guide, Pl. X. 10. Zeit. für Numis., vol. ii. p. 123 (woodcut).

Noted. Leake, Num. Hellen. Suppl., p. 44.

Hecta. Brit. Mus., 41 grs.

This type is identical with that so frequent on the coins of Gela, and Von Sallet (Zeit. für Num., vol. ii. p. 123) considers that it is merely a copy of those coins. Mr. Head (Num. Chron., N.S., xvi. p. 283) inclines to believe it represents either the river Aesepus or the Rhyn-dacus, both in Cyzicene territory. I prefer Von Sallet's explanation, nor can I see anything in the subject specially connected with Cyzicus. Many of the staters contain direct reproductions of the types of other cities, and the practice was not infrequent with the Cyzicene mint.

52. Winged female figure, wearing peplos over knees, kneeling to left, and holding an aplustre in the right hand in front of her face; her left arm, which is wrapped in the peplos, rests on her hips. Beneath, tunny left.

Paris (*a*), 247 grs. [Pl. III. 1]. Brit. Mus. (*a*), 245·4. W. G. (*a*), 245·7. (Bompois sale, No. 1377). Carfae, 246·6. R. and F.
(*a*) same die.

Engr. Rev. Num., N.S., vol. i., Pl. II. 5. Gardner, Types, Pl. X. 2.

Noted. Num. Chron. vi. p. 151. Leake, Num. Hellen. Suppl. p. 44.

Hecta. St. Pet., 41 grs.

The figure is of Nike, and, as she holds an aplustre, the victory commemorated must have been a naval one. It may, as in the case of the stater No. 48, have been struck

after the battle off Cyzicus, B.C. 410. If this be so, we have two coins serving as a memorial of the same event. This, however, need cause no difficulty, and it is not improbable that the two staters may have been issued in different years and under the authority of different magistrates, which would naturally cause a change in the treatment of the memorial-type. Indeed, if we may judge by its art and other characteristics, the die for this stater may have been engraved a few years after that of No. 48, which would account for the slight advance in style which it appears to exhibit. At the time in question art was developing with great rapidity, and was about to culminate at the highest point it has ever reached, when a short period was sufficient to allow of a material change in design, fabric, and workmanship. M. Charles Lenormant (*Rev. Num.*, N.S., vol. i. p. 38, *note*) supposes the stater to have been struck in commemoration of the victory of Timotheus over the Peloponnesian fleet, B.C. 375, which he considers was a deliverance for Cyzicus. There can be no doubt, as I have stated above, that the type was connected with a naval victory, but not one so late as that suggested. Nor does the victory in question appear to be one sufficiently important to Cyzicus to have induced her to commemorate it on her coinage.

This is perhaps the first instance where Nike appears on a coin as the goddess of victory in war. On the coins of other Greek states she seems to be, up to this date and onwards, until the time of Alexander and the Diadochi, the goddess of agonistic victory. The only representation of the same import with which we are acquainted is the well-known tetradrachm of Demetrius Poliorcetes, where Victory stands on a prow blowing a trumpet.

53. Winged female figure, wearing long chiton, flying to right, with outstretched hands, and holding a wreath. In front, tunny upwards.

Hecta. Berlin, 40·7 grs. [Pl. III. 2].

Again a figure of Nike.

54. Female figure, wearing long chiton and peplos, seated left, holds a wreath in her right hand, her left resting on the seat behind her, upon which is inscribed $\begin{matrix} \text{EAEY} \\ \text{OEPI.} \end{matrix}$ Beneath, tunny left.

Paris, 246·1 grs. [Pl. III. 3]. St. Pet., 248. Found near Kertch.

Both same die.

Engr. Millingen, *Anc. Coins*, Pl. V. 13. Mionnet, *Suppl.*, v. p. 304, No. 127, Pl. III. 3. *Ant. du Bosph. Cimmér*, vol. ii. p. 154. *Mon. Ined. dell' Inst.*, vol. i. Pl. LVII. B. 4.

Noted. Brandis, p. 407.

Twelfth. Lübbecke, 19·4. It is inscribed $\begin{matrix} \text{EA} \\ \text{[E]Y} \end{matrix}$

Noted. *Zeit für Numis.*, xii. p. 312.

The figure is no doubt one of Eleutheria.

This stater appears to be of a later date than Nos. 48 and 52, and may be attributed to the commencement of the fourth century B.C. The victory of Conon over the Lacedæmonian fleet under Peisander, near Cnidus, in B.C. 394, had put an end to the Spartan rule in Asia, which had existed since the battle of Ægospotami, opposite Lampsacus, B.C. 405. With scarcely an exception the towns on the mainland and the islands now threw off the Spartan yoke and accepted the autonomy proclaimed by Conon and Pharnabazus as they visited the various places. Though not specially mentioned, there can be little doubt that Oyzicus was among the states which





declared against Sparta, for the connection with Athens had been long and intimate. It is not improbable that to this time the present stater may be attributed, and if the figure denotes the victory obtained over the Lacedæmonian fleet, then the inscription would record the freedom gained by the overthrow of the tyranny of Sparta. The theory of M. Charles Lenormant (*Rev. Numis.*, N.S., vol. i. p. 26), and accepted by some writers of authority, notably by his son M. François Lenormant, that it commemorates the Persian defeat by Alexander at the Granicus, B.C. 334, is quite untenable; and, indeed, I do not believe that any of the Cyzicene electrum coins can, with any probability, be assigned to so late a period.

The theory of Millingen, who first published the stater, appears to be equally untenable, but his error is in assigning too early a time for its issue. He thinks that it was struck in commemoration of the victory of the Athenians, under Cimon, over the Persians, when, in B.C. 449, independence was restored to the Greek cities in Asia and the Persian yoke was broken.

A copper coin of Cyzicus, which has on the obverse a head of Persephone, has for its reverse an almost exact copy of the stater type. No wreath is visible, nor is there any inscription on the seat, but **ΕΛΕΥΘΕΡΙΑ** is placed in front of the figure, inscribed in a single line.

55. Female figure, seated sideways on lion, but to left; she wears a long chiton with sleeves, and, apparently, a turreted crown; her right hand is outstretched over the lion's head, and the left, wrapped in the chiton, rests on her knee. Beneath, tunny left.

Waddington, 247·3 grs. [Pl. III. 4].

Engl. Waddington, *Voyage en Asie Mineure*, Pl. VIII. 2. *Rev. Num.*, xvii. p. 87, Pl. IV. 2.

Noted. Brandis, p. 407.

Part of the figure is off the coin, so that it is impossible to say what, if anything, was held in the right hand. The condition also is not sufficiently good to say positively that the figure wears a turreted crown, though there appear to be indications of it. There cannot be any doubt, however, that the Magna Mater, Cybele, is here represented, and accompanied as usual by the great feline beast, her sacred lion. Her worship had spread from Phrygia, and was in early times established in Mysia, where she became largely identified with Rhea. Under the name Dindymene, her chryselephantine statue,³⁴ which had been carried off from Proconnesus, was preserved at Cyzicus, where she was worshipped under the names Lobrina and Placiana.

On a frieze lately discovered at Pergamon there is a representation of Cybele seated on a lion.

56. Beardless male head to right, with long flowing hair, wearing necklace and Phrygian bonnet, upon the lappets of which are dotted marks in sets of three. Beneath, tunny right.

W. G. (a), 248.4 grs. [Pl. III. 5]. Paris (b), 247. Berlin (Fox), 246.8. Munich (c), 250.
(a), (b), (c), diff. dies.

Engr. Mionnet, Suppl., v., Pl. II. 4. *Rev. Num., N.S.*, vol. i., Pl. II. 2.

Noted. Brandis, p. 408.

Hecta. Paris (a), 89.5 grs. [Pl. III. 6]. *Brit. Mus.*, 89.2. Paris (De L.) (b). Imhoof (c), 40.8. Six (a), 41.
(a), (b), (c), diff. dies.

Engr. *Rev. Num., N.S.*, vol. i., Pl. II. 3.

Noted. Brandis, p. 408.

³⁴ The ivory was not elephant's tusk, but of the teeth of the hippopotamus. Pausanias, viii. 46.

The same head, with a tunny beneath, occurs on a silver coin of Cyzicus, which has on the reverse a lion's head with open mouth and the letter Λ . All in square incuse. (Rev. Num., N.S., vol. i. Pl. II. 4.)

This very charming head of Atys finds an appropriate place on the coinage of Cyzicus, through his intimate connection with the cult of Cybele.

57. Naked male figure, with rounded wings and short tail, and the head of a lion, turned back, kneeling to left; he holds a tunny by the tail in his right hand, his left resting on his side.

W. G. (a), 246·7 grs. (Bompois sale, No. 1376). [Pl. III. 7]. St. Pet., 246·8. Imhoof (b), 249·5.
(a), (b), diff. dies.

Engr. Imhoof-Blumer, Choix, Pl. III. 102.

Noted. Imhoof-Blumer, Monn. Grecq., p. 242, No. 71.

A type perhaps impossible to explain with entire satisfaction. The oriental character of the monster is evident, and its occurrence on a coin of Cyzicus may be due to Persian influence. At the same time, in a city of so much commercial enterprise, and which had relations of one kind or another with many and different places, it is not to be wondered that subjects with which the state had no natural or intrinsic connection should be found on its coinage. The type may possibly have been placed on the stater by a magistrate who had trading business with the maritime towns of Phœnicia, where, through earlier intercourse with Assyria, such strange monster forms were familiar. A lion-headed man with eagle's feet occurs frequently among Assyrian sculptures.

Were we to carry back the figure to its first conception, and seek for an explanation of its features, we might recognise the revolution of the sun in its then supposed

orbit, and imagine him as just escaping from the bondage of night. The wings and the reverted hand and 'savage leonine head, with its opened mouth, are all features quite consistent with such an explanation.

Dr. Imhoof-Blumer (*Monnaies Grecques*, p. 242) regards the figure as Fear ($\Phi\acute{o}\beta\omicron\varsigma$). (Milchhöfer, *Arch. Zeit*, 1881, p. 286). On the chest of Cypselus, the shield of Agamemnon, who is fighting with Coon, had upon it a representation of Fear, with a lion's head.³⁵

On the frieze lately discovered at Pergamon, is a lion-headed man.

Among a number of bas-reliefs near the village of Jasili-Kaia, in ancient Cilicia, which are attributed to the Hittites, are two winged monsters, one a lion-headed man, the other, as M. Perrot thinks, a dog-headed man.³⁶

58. Winged female figure in rapid motion to left, the head turned back, wearing stephane and a sleeveless chiton, which reaches to the feet; hair represented by dots. She holds a tunny by the tail in the right hand, and in the left the tasselled end of a cord ($\zeta\acute{\omega}\nu\eta$), which is passed round her waist.

Brit. Mus. (a), 247·6 grs. (Thomas sale, No. 1774).
[Pl. III. 8]. Paris (De L.) (b), 247·5.
(a), (b), diff. dies.

Engr. *Annuaire de la Soc. de Num.*, vol. iv., Pl. VIII.
12. Brit. Mus. Guide, Pl. X. 7. Gardner,
Types, Pl. IV. 20.

Noted. Brandis, p. 406.

³⁵ Pausanias, lib. v. c. 19.

³⁶ *Explor. Archéol. de la Galatie, &c.*, par M. Perrot. Pl. XLVIII., reproduced in *Histoire de l'art dans l'Antiquité*, Perrot et Chipiez, vol. iv. p. 640.

Hecta. Paris (De L.) (*a*), 41.2 grs. [Pl. III. 9].
 Brit. Mus. (*b*), 39.6. Paris (*c*), 41.4. Berlin,
 40.8. Waddington, 41 (Dupré sale). Iversen,
 40.2.

(*a*), (*b*), (*c*), diff. dies.

Engr. De Luynes, Choix, Pl. X. 8.

Noted. Mionnet, Suppl., ix. p. 230, No. 21.

An archaic coin, and possibly not later than B.C. 500. The figure can scarcely represent Nike, for the action is inconsistent with such an attribution. Like other staters it appears to contain a part only of a larger subject, and with some modifications was, probably, copied from such a group. No coin has up to the present time come to light which might be supposed to supply the complementary part of the subject, but the same is the case in other instances, where there can be no doubt that we have a portion only of a group.

A figure much like that on the coin occurs, on a vase, in association with a scene where Heracles is pursuing Apollo carrying off a hind (Roulez, Choix de vases du Mus. de Leide, p. 31). A similar figure is found on a cylix by Brygos in the British Museum (E. 77), on which is painted Iris seized by Satyrs, Dionysus standing by (Mon. Ined. dell' Inst., ix. Pl. XLVI.). A winged female figure holding a wreath and sceptre, or caduceus, at other times a round disk on which a star is sometimes found, and frequently having the head turned back, occurs on coins of Mallus. M. Waddington (Rev. Num., N.S., vol. v. p. 1, Pl. I.) suggests the figure may be Iris or Nike. Other subjects on the coins of Mallus appear to associate the types with the Syrian Aphrodite-Astarte.

59. Naked winged male figure walking to left, holds a tunny by the tail in each hand.

Berlin, 248.4 grs. [Pl. III. 10].

Engr. Blätt. für Münz., vol. iv., Pl. XLIV. 1.

A very archaic coin.

The subject, which has not as yet been explained, may possibly be connected with some oriental cult. Koehne, in the account of the stater in Blätter für Münzk., suggests that, perhaps, it is an Eros of very Asiatic type.

60. Winged male figure running to left, holding tunny by the tail.

Twelfth. Brit. Mus., 20 grs. [Pl. III. 11].

The coin is very badly struck, and presents the same difficulty of explanation as the last.

61. Winged male figure, apparently naked, running to left, holds a tunny by the tail in right hand, the left being held up in front of face.

W. G., 249.3 grs. [Pl. III. 12].

Like No. 59 a very archaic coin, and equally difficult to explain.

62. Bearded head, covered with lion's scalp, to right. Beneath, tunny right.

Brit. Mus. (a), 246.4 grs. [Pl. III. 13]. Paris (b), 247.

Berlin (Fox), 246. Moore, 248.5.

(a), (b), diff. dies.

Engr. Fox, Unpubl. Coins, Part II., No. 23.

Head of Heracles, who, as a partaker in the expedition of the Argonauts, becomes connected with Cyzicus, and who is represented in various aspects upon many of the

staters. Heracles upon a coin of Trajan, struck at Cyzicus, is called the founder (κτίστης), probably on account of his share in the Argonautic expedition.

63. Two youths, naked, kneeling on tunny left, and turned from each other; the one to left is strangling two serpents, he to right appears to be in the act of imploring aid.

Paris, 247 grs. [Pl. III. 14]. Berlin (Prok.-Ost.), 248·5. Munich, 247. W. G., 247·4. Weber, 248·6.

All from the same die.

Engr. Sestini, Stat. Ant. Pl. VI. 12. Prok.-Ost. Ined. (1854), Pl. IV. 2. Rev. Num., N.S. viii., Pl. X. 6.

Noted. Mionnet, Suppl., v. p. 369, No. 547.

Hocta. Munich, 40·2 grs. Imhoof, 40·4.

Both same die.

Engr. Sestini, Stat. Ant. Pl. VI. 11.

Noted. Mionnet, Suppl., v. p. 369, No. 546.

Heracles and his younger brother Iphicles, the former strangling the serpents sent by Hera to destroy them. The subject appears to have been copied from a group in marble, and probably from one forming a metope of a temple.

Among the vases at the Castellani sale (1884) was one (No. 80), which represents Heracles and Iphicles, the latter in the same attitude as on the stater, stretching his hands towards Alcmene, Pallas standing by.

The same subject occurs on a coin of Lampsacus (De Luynes, Ann. dell' Inst. Arch. xiii. p. 150), and the type of Heracles and the serpents, but without his brother, is found on coins of Thebes, and of Samos, Ephesus, Cnidus, Iasus, and Rhodes, states in alliance after the

battle of Cnidus, B.C. 394, also on coins of Lampsacus, Croton, Tarentum, and Zacynthus. The type appears to have originated at Thebes, which was the promoter of the resistance to the Spartan hegemony, resulting in its overthrow (B.C. 394—390), and was copied by the first group of states, Samos, &c., as a symbol of confederacy in the cause of independence, and afterwards adopted by Cyzicus, Lampsacus, and other cities.

64. Heracles, youthful, naked, kneeling to right on tunny; he holds a club in his right hand, and in his left a strung bow.

Imhoof (*a*), 245·6 grs. [Pl. III. 15]. Paris (*b*), 248·5. Athens (*b*), 248·7. W. G. (*b*), 247·1 (Whittall sale, 1884, No. 754).
(*a*), (*b*), diff. dies.

65. Bearded figure of Heracles, naked, kneeling right, brandishing a club, held in right hand, over his head, and holding a strung bow and two arrows in his left; hair represented by dots. Behind him, tunny upwards.

Brit. Mus. (*a*), 247·3 grs. [Pl. III. 16]. W. G. (*a*), 249·2. One sold at Sotheby and Wilkinson's, March 22, 1877, No. 101. Another sold at sale of Bank Dupl., Feb. 13, 1878, No. 216.
(*a*), same die.

Engr. Num. Chron., N.S., xvii., Pl. VI. 1. Brit. Mus. Guide, Pl. X. 8. Gardner, Types, Pl. IV. 19.

Hecta. Paris (De L.), 40·2 grs.

Though this stater was one of the great find of 1875, it belongs to a much earlier period than the majority of those then discovered. If we may judge from its unworn condition, it does not appear to have been much circulated. We know that the staters were current, but they were no doubt commonly kept as what may be called bank deposits,

and were stored to a large amount in the temple treasuries.

Among the gems (Blacas) in the British Museum is a sard, upon one side of which is Heracles, wearing the lion's skin on his back, and holding a club over his head in right hand, and a bow in his outstretched left. On the other side of the stone is Heracles in the garden of the Hesperides.

66. Naked bearded figure, seated to left on rock, the head and body partly facing, but inclining to right; he holds a club downwards in his right hand, his left rests on the rock. Beneath, tunny left.

Berlin (Prok.-Ost.), 245·7 grs. [Pl. III. 17].

Engr. Rev. Num., N.S., ix., Pl. I. 9.

Heracles in the attitude of repose after one of his labours, his club reversed, and his hand resting peacefully behind him. A somewhat similar representation occurs on a coin of Abdera in the Berlin Museum.³⁷

67. Bearded figure, naked, kneeling left, holding a club over right shoulder in his right hand, and a horn upwards in his left. Behind, tunny upwards.

W. G. (*a*), 248·4 grs. [Pl. III. 18]. Paris (*b*), 245·7.

Weber (*c*), 248·1.

(*a*), (*b*), (*c*), diff. dies.

Heracles, after his defeat of Achelôus, when he tore off one of his horns, is here represented either holding that horn, or receiving in exchange that of Amaltheia, the well-known horn of plenty.

³⁷ Friedländer, *Zeit. für Numis.*, vol. v. p. 2 (woodcut).

68. Heracles, naked, beardless, kneeling to right on tunny, and holding a club downwards in his right hand, and the lion's skin on his left arm.

Brit. Mus., 247·7 grs. [Pl. III. 19].

Engr. Num. Chron., N.S., xvii., Pl. VI. 2.

69. Heracles kneeling right on tunny, and strangling the Nemean lion.

Paris (De L.) (a), 247 grs. [Pl. III. 20]. Brit. Mus. (a), 247·1. Paris (a), 247. W. G. (a), 248. Weber, 247·9.

(a) same die.

Engr. Raoul Rochette, Hercule Assyrien. Pl. III. 6. Num. Chron., N.S., xvi., Pl. VIII. 13.

Noted. Brandis, p. 405.

70. Bearded head to left, wearing conical head-dress (καλιν), wreathed with laurel. Beneath, tunny left.

St. Pet. (a), 247 grs. [Pl. III. 21]. Paris (De L.) (b), 246·8. Ashburnham.

(a), (b), diff. dies.

Engr. Sestini, Stat. Ant., Pl. VI. 2.

Noted. Mionnet, Suppl. v., p. 368, No. 542, under Lampsacus. Brandis, p. 408.

This head, which may be, as Professor Gardner suggests (Types, p. 174), of a Cabeirus, is also found on a gold stater of Lampsacus. It has usually been attributed to Odysseus or Hephæstus. The head has not, perhaps, as Mr. Gardner says, "The stately repose which belongs to the divine and consummate artist Hephæstus," but I see no reason why it is not consistent with the crafty, restless, and bold Odysseus, the hero of many wanderings. It looks, indeed, like the head of a storm-tossed, but not weary or disheartened warrior, such as was he who had undergone, but not succumbed to, perils of war on land and of tempests on the sea.

71. Bearded figure, wearing chlamys and conical cap, kneeling to left over a ram, which he is about to slay with a sword, held in his right hand and pointed downwards. Beneath, tunny left.

Berlin (Prok.-Ost.), 245·7 grs. [Pl. III. 22].

Engr. Rev. Num., N.S., ix., Pl. I. 10.

Noted. Königl. Münz-Kab. (1877), No. 103.

Hecta. Berlin (Prok.-Ost.), 42·4 grs.

This subject, attributed by M. François Lenormant (*Rev. Num.*, N.S., ix. p. 15) to Phrixos sacrificing the ram with the golden fleece, which had carried himself and his sister Helle, is more probably Odysseus, by the advice of Circe, slaying the animal she had provided, before his descent into Hades. The bearded figure is an older person than Phrixos as usually represented, and the head-cover is the cap which Odysseus usually wears. Pausanias, however (Book I., ch. xxiv.), says he saw on the Acropolis at Athens a statue of Phrixos sacrificing a ram to an unknown god, but whom he conjectures to be the same as him to whom the people of Orchomenos gave the name Laphystios, an appellation of Zeus and corresponding to Phyxios.

72. Bearded figure, wearing chlamys which hangs behind, kneeling to left alongside the omphalos, on which his left hand rests; he holds a naked sword upright in his right hand. Beneath, tunny left.

W. G., 246 grs. [Pl. III. 23].

Hecta. Brit. Mus., 38·6 grs.

Orestes at Delphi, after the murder of Aegisthus, before his expiation. The figure, bearded and of mature age, might be supposed to be incompatible with one of

Orestes, who is usually represented as youthful, but on many early vases youths are represented bearded.

Orestes occurs on vases either kneeling or sitting by the omphalos, though not in quite the same position he occupies on the stater. In all these instances he holds a sword.³⁸ On a marble in the museum at Naples³⁹ he is represented as a youthful figure, holding a sword and seated near the tripod at Delphi. A female figure, probably his mother, is represented as lying dead, and Apollo holding a bow is placed on a term. Except for the fact that many of the staters present subjects not in any way connected with Cyzicus, so far at least as is known, it might be doubted if Orestes is the person here represented.

73. Head, wearing helmet which terminates at the back in a rounded wing, hair hanging beneath helmet and represented by dots. Behind, tunny downwards.

W. G. (a), 248 grs. (Whittall sale, 1884, No. 747). [Pl. III. 24]. Paris (b), 248·7. [Pl. III. 25].

Weber (c), 248.

(a), (b), (c), diff. dies.

Hecta. Munich, 41 grs.

Engr. Sestini, Stat. Ant., Pl. VI. 16.

Noted. Mionnet, vi., p. 620, No. 48. Suppl. v., p. 370, No. 550.

This stater, with the head of Perseus, wearing the helmet of Hades lent him by the nymphs, is one of the earliest coins among those of the great find of 1875. The eye is represented as if seen in front, and the hair by dots.

³⁸ Overbeck, Gal. heroischer Bildw., Pl. XXIX. 4, 7, 9, 12.

³⁹ Mus. Borbon, vol. iv., Pl. 9.

74. Male figure, kneeling left on tunny, with head turned back and covered by a helmet terminating behind in a pointed wing; he wears a chlamys fastened at the neck and folded over the left arm; in his right hand he holds the harpa, and in his left the head of Medusa.

Paris (De L.), 248.1 grs., [Pl. III. 26]. Waddington, 245.7.

Engr. Mon. Ined. dell' Inst., vol. iii., Pl. XXXV. 28.

Noted. Num. Chron., vi., p. 150, where Mr. Borrell says the helmet is terminated by the head of a vulture. Brandis, p. 406.

Hecta. Berlin, 41.3 grs.. Imhoof.

Perseus, immediately after slaying Medusa. His attitude betokens expectancy of attack from behind, and he appears to be viewing the Gorgons in pursuit, though there is no indication of fear, the expression being that of confident preparedness. According to Pausanias (v. c. xviii), on the chest of Cypselus there was a representation of the Gorgons pursuing Perseus. He also mentions (i. c. xxii.) a picture in the temple of Nike Apteros at Athens, where Perseus is bringing the head of Medusa to Polydectes at Seriphos.

75. Head of Gorgon. Beneath, tunny left.

Hecta. Berlin, 41 grs. [Pl. III. 27].

76. Two naked figures running in line to right; the right hand of the figure in front holds a sword prepared to thrust with, and a chlamys hangs over the extended left arm. Beneath, tunny right.

W. G. (a), 247.3 grs. [Pl. III. 28]. Brit. Mus. (b), 246.
(a), (b), diff. dies.

Engr. Gardner, Types, Pl. X. 4.

Noted. Num. Vet. R. P. K., p. 109.

Harmodius and Aristogeiton about to kill Hipparchus. The subject, a popular one at Athens, was not unlikely to occur on the coinage of a city so long connected with that state as Cyzicus. It is probably a copy, more or less faithful, of the group by Critios and Nesiotes, which replaced the earlier one by Antenor, carried off by Xerxes, though afterwards restored by Alexander Seleucus or Antiochus. A copy of the original group exists at Naples, though in a much restored form.⁴⁰ A similar representation to that on the stater occurs on a tetradrachm of Athens (Beulé, p. 335), and on a Panathenaic vase in the British Museum (B. 637).⁴¹ The usual attitude represents the figure behind holding his sword above his head in the act of striking, and on the stater the same position appears to be intended.

This seems to be the only representation of ordinary mortals appearing on a coin of an early date. The memory of the two brothers was, however, so venerated at Athens that they became invested with more than merely human characteristics, and in that relation were entitled to a position equal to that of semi-deified personages.

77. Head to left, on raised circular disk, wearing earring; the hair, in formal rolls, is represented by dots, and is apparently tied up behind. Beneath, tunny left.

Brit. Mus. (a), 248.3 grs. [Pl. III. 29]. Munich (b), 247, [Pl. III. 30]. Paris (c), 242.7.
(a), (b), (c), diff. dies.

Engr. Sestini, *Stat. Ant.*, Pl. V. 1, 2. Dumersan, *Cat. Allier*, Pl. XII. 8. *Rev. Num.*, N.S., vol. i., Pl. I. 6. *Brit. Mus. Guide*, Pl. X. 6.

⁴⁰ Overbeck, *Gesch. der Griech. Plastik*, i., p. 117, *seq.*, fig. 16.

⁴¹ *Mon. Ined. dell' Inst.*, vol. x., Pl. XLVIII., d.

Noted. Num. Vet., R. P. K., p. 134. Mionnet, vi., p. 617, No. 29. Brandis, p. 408.

Hecta. Berlin. Munich, 40·7 grs.

Engr. Sestini, Stat. Ant., Pl. V. 3, 4.

Noted. Mionnet, vol. vi., p. 617, No. 30.

Twelfth. Berlin, 21·3 grs. St. Pet., 20·7.

Engr. Sestini, Stat. Ant., Pl. V. 5.

The head, though wearing an earring, has more of male than of female characteristics, and on a tetradrachm of Amphipolis, Apollo is represented wearing an earring.⁴²

The disk is probably that of the Sun, and the head that of Helios, as the Sun-god. It is not radiate, but on the earlier coins of Rhodes the rays are equally wanting. On another stater, No. 23, Helios is represented radiate, and the later Rhodian coins also have a radiate head. Upon a stater of Lampsacus the head of Helios is placed on a radiate disk (Head, Hist. Num., p. 456).

It has been suggested that the head is of a discobolus, placed upon a disc.

78. Male head, with pointed beard, to left; hair hanging long behind and represented by dots. Beneath, tunny left.

Imhoof, 249·8 grs. [Pl. III. 31].

Engr. Imhoof-Blumer, Choix, Pl. III. 100.

Noted. Imhoof-Blumer, Monn. Grecq., p. 242, No. 69.

Hecta. Paris (two), 41 grs. (a), 38·7. Six (b), 37·6, plated (Subhi sale, No. 667).
(a), (b), diff. dies.

Engr. Sestini, Stat. Ant., Pl. IX. 25. Rev. Num., N.S., vol. i., Pl. I. 7.

Noted. Mionnet, ii., p. 528. No. 80.

An archaic coin, of a head not yet identified.

⁴² Königl. Münz-Kab., 1877, No. 327.

79. Youthful male head, with short hair, to left. Behind, tunny downwards.

W. G., 245·8 grs. [Pl. III. 32].

This head may possibly, like that on the next stater, be of the hero Cyzicus, but there is nothing distinctive about it to enable us to attach it to any god or hero.

80. Youthful male head to left. Beneath, tunny left.

Paris (two), 248·6 grs. (a) [Pl. IV. 1], 246·7. Brit. Mus. (b), 248·6. W. G. (a), 245·8. (Subhi sale, No. 211). Lambros.
(a), (b), diff. dies.

Engr. Num. Chron., N.S. xvi., Pl. VIII. 11.

Noted. Brandis, p. 408.

The absence of a wreath is inconsistent with the head being attributed to Apollo or Dionysus. As has been suggested by Mr. Head (*Num. Chron.*, N.S., xvi. p. 281), it may be of the hero Cyzicus, whose head, wearing a diadem, and with his name, is frequently found on copper coins of the state.

81. Bald, bearded and laureate head to right. Beneath, tunny right.

W. G. (a), 245·9 grs. (Thomas sale, No. 1912. Northwick, No. 955. Paravey, No. 187). [Pl. IV. 2]. Paris (De L.) (b), 247·5. [Pl. IV. 3]. Paris, 242·7. Berlin, 246·8.
(a), (b), diff. dies.

Engr. Sestini, *Stat. Ant.*, Pl. V. 20. Mionnet, Pl. XLIII. 1. *Num. Chron.*, N.S., xx., Pl. I. 10. Gardner, *Types*, p. 175, Pl. X. 42.

Noted. Brandis, p. 408. Königl. Münz-Kab. (1877), No. 105.

A most remarkable coin, and one which presents grave difficulties in its explanation. On account of the time at which it must have been struck, it is perhaps impossible, notwithstanding the exceptional scope of the Cyzicene representations, to consider it as intended to portray any individual personage of however exalted a position. At the same time it must be remembered that there is, upon a coin attributed to Colophon, as well as on others, a head which can scarcely be regarded as other than a portrait, though Professor Gardner (*Types of Greek Coins*, p. 144) believes it to be the idealised head of a Persian king. But whoever the artist of the Cyzicene stater meant to represent, there can be little doubt he modelled the portrait from the life.

82. Youthful, beardless, male head to right, wearing a wreath of laurel? Beneath, tunny right.

Paris, 247 grs. [Pl. IV. 4].

Noted. Brandis, p. 408.

This head, which appears to wear a wreath of laurel, may possibly be of Apollo, though it is certainly not one characteristic of the god.

83. Youthful, beardless, male head to left, with short hair and wearing tænia tied over the forehead. Beneath, tunny left.

Paris (De L.) (a), 246·5 grs. [Pl. IV. 5]. Paris (b), 248·6. Berlin (Fox), 247. (Thomas sale, No. 1911).

(a), (b), diff. dies.

Engr. Fox, *Unpubl. Coins*, ii. No. 24.

Noted. Königl. Münz-Kab. (1877), No. 104.

One of the latest issues of the staters. It is very similar to the head of Dionysus on a coin of Timotheus, dynast of Heraclea, in Bithynia.

84. Female head to left. Beneath, tunny left.

Lewis, 245·5 grs. [Pl. IV. 6]. Weber, 246·6.

85. Female head to right, wearing earring, and with head in saccos drawn together at the top, and ornamented with a mæander pattern above and a zigzag. Beneath, tunny right.

W. G., 246·9 grs. (Whittall sale, 1884, No. 759). [Pl. IV. 7]. Six, 248·3.

The head on this stater is a direct copy from that on a well-known tetradrachm of Syracuse, similar to No. 112, Cat. of Sicilian Coins, in the British Museum. It is one of the many proofs, and a most convincing one, that Cyzicus reproduced on its coinage the types of other and sometimes remote states.

86. Naked figure, bearded, kneeling to left, holds a tunny by the tail in his right hand, his left resting on his right thigh.

Paris, 251·4 grs. [Pl. IV. 8]. Brit. Mus., 248·7.
Diff. dies.

Engr. Num. Chron., N.S., xvii., Pl. VI. 4.

Noted. Num. Chron., vi., p. 151. Brandis, p. 405.

Hecta. Brit. Mus. (*a*), 36·9 grs. Paris, 40·2. Munich (*b*), 41. Vienna (*c*), 42·3. Berlin (three), (Prok.-Ost.), 40·1. (Fox), 41. (Sperling), 39·7. Six (*a*), 41·5. Bunbury, 40. Weber (*d*), 41·6. W. G. (*b*), 40·9. (Whittall sale, 1884, No. 351). R. and F., 39·4.

(*a*), (*b*), (*c*), (*d*), diff. dies.

Engr. Sestini, Stat. Ant., Pl. V. 10.

Noted. Mionnet, vi., p. 616, No. 22.

Twelfth. Paris, 18·6 grs. Berlin (three), 20·6, 20·5, 19·5. Munich, 20·5.

Engr. Sestini, Stat. Ant., Pl. V. 11.

Noted. Mionnet, vi., p. 616, No. 23.

87. Naked male figure, half-kneeling to left, holding a tunny by the tail in each hand.

W. G., 247 grs. [Pl. IV. 9]. Lambros in 1885.

Engr. Num. Chron., N.S., xx., Pl. I. 9.

A coin of an earlier date than the greater number of those of the find of 1875, of which I believe, though I have no certain proof, it formed a part. The exaggerated way in which the muscles are expressed is very characteristic of early work, and is well shown on the stater. The subject is one, like the last and many others, which seems beyond explanation.

88. Male figure, naked, beardless, kneeling right, wearing tænia; he holds in his right hand, which hangs down by his side, a large knife downwards, and on his extended left hand a tunny.

W. G., 248·1 grs. [Pl. IV. 10]. Brit. Mus., 246·4. Hunter, 248·4.

All diff. dies.

Engr. Hunter, Pl. LXVI. 1. Sestini, Stat. Ant., Pl. V. 8. Num. Chron., N.S., xvii., Pl. VI. 3.

Noted. Mionnet, vi., p. 616, No. 21.

Hecta. The Hague (*a*). [Pl. IV. 11]. Brit. Mus. (two), 41 grs., (*b*), 40·3. Paris (De L.), 41. Berlin (Prok.-Ost.), 40·7. Imhoof (*c*), 41·5. Six (*d*), 41·4. Waddington (Dupré sale), 41·3. Carfræe (*e*), 40·5. W. G. (*a*), 40·3.
(*a*), (*b*), (*c*), (*d*), (*e*), diff. dies.

Engr. Sestini, Stat. Ant., Pl. V. 9. De Luynes, Choix, Pl. X. 9 (incorrectly).

Noted. Mionnet, Suppl., v., p. 303, No. 120.

Upon some of the hectæ the tænia is very visible, and the prominence of the spike over the forehead gives the head somewhat of the appearance of having a horn.

89. Child, naked, seated facing, but turned to right, resting on his left arm, and holding a tunny by the tail in his right hand.

Brit. Mus., 245·9 grs. [Pl. IV. 12]. Paris, 247.
Diff. dies.

Engr. Mionnet, Suppl., v., Pl. III. 2. Num. Chron., N.S. xvii., Pl. VI. 5.

Noted. Mionnet, vi., p. 615, No. 19. Suppl., v., p. 301, No. 110. Brandis, p. 405.

Possibly a figure of the youthful Heracles.

90. Naked male figure, kneeling to left on tunny; he is stooping forward, and holds on his right arm a crested helmet, and in his left hand a short sword.

W. G. (a), 244·5 grs. (Whittall sale, 1884, No. 745). [Pl. IV. 13]. Brit. Mus. (b), 246. Berlin. Waddington, 246·9. R. and F. One sold at Whittall sale (1884), No. 746.
(a), (b), diff. dies.

Engr. Num. Chron., N.S., xvi., Pl. VIII. 16.

Hecta. Brit. Mus., 41·7 grs. (Huber sale). Berlin, 41·2.

Mr. Head, in his paper on the coins of the find of 1875 (Num. Chron., N.S., xvi., p. 282), suggests that this figure may be one of the Argonauts, and the attribution is not improbable, the mythical history of Cyzicus being so closely connected with their expedition.

91. Male figure, naked, in a stooping position to right, wearing a crested helmet from which a plume projects behind, on his left arm he holds a round shield, his right being outstretched over a tunny downwards.

Imhoof (a), 246 grs. [Pl. IV. 14]. Brit. Mus. (b), 246·3. Paris (De L.), (c), 245·7. Bunbury (Dupré sale, No. 252). Jones. W. G. (d), 249·8. Lambros in 1885.

(a), (b), (c), (d), diff. dies.



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Noted. Num. Vet., R. P. K., p. 45. Brandis, p. 406.

Hecta. Paris (De L.), 42·8 grs. Copenhagen.

Engr. De Luynes, Choix, Pl. X. 7.

Noted. Brandis, p. 406.

This figure perhaps represents a statue of a hoplite who has either been victorious in a race and extends his hand to receive the prize, or else one who is preparing for the race. Cf. a kylix at Leyden, on which a victorious hoplite stands, in the same attitude, at the goal; he carries a shield on which is a running hoplite. Cf. also Bull. Napol. N.S. VI. Taf. 7; Mitth. d. arch. Inst. 1880, Pl. XIII.; and Pausanias I. 23, 9 (statue of Epicharinus).

92. Male figure, naked, kneeling left on tunny; he is advancing a round shield on his left arm, and is apparently about to thrust with sword or spear, held in his right hand.

Paris, 247 grs. [Pl. IV. 15].

Engr. Raoul-Rochette, Mem. d'Arch. comp. Sur l'Her-cule Assyrien. Pl. II. 17.

The coin is double struck and in poor condition.

The warrior, whoever he may be, appears to be awaiting the attack of an enemy, and covers himself from the approaching lance or sword-thrust with his shield. This may be another instance where a part has been selected from a larger subject, such as one of Centaurs and Lapithæ, or of Greeks and Amazons. M. Waddington⁴³ gives an engraving of a coin attributed to the Satrap Orontes, where a warrior, with a conical head-dress and armed with a spear, shelters himself behind his shield. He thinks it may represent the Athenian general Chabrias, who introduced a system of tactics against an attacking

⁴³ Rev. Num., N.S., viii., Pl. XI. 5. The coin is also figured, De Luynes, Satrapies, Pl. VIII. 1.

enemy, in which the shield was placed on the ground, and whose statue represented him in the same attitude. Bronze coins of the Tauric Chersonesus have a similar subject and treated in a similar way. The stater, however, cannot be attributed to so late a time as that of Chabrias, who was killed B.C. 357, and although he introduced a certain method of resisting an attack by placing the shield of the hoplite on the ground instead of its being held higher, the attitude is one which must have been commonly used to resist an individual attack, if it was not one where a larger body of men was employed. The position is a quite common one upon Assyrian sculptures, where native soldiers, and what may be Carian mercenaries, are represented sheltering behind their shields fixed on the ground.

93. Male figure, naked, wearing crested Corinthian helmet, kneeling to right; he holds an arrow with both hands, along which he appears to be looking to see if it is straight, before adjusting it to the bow, which hangs upon his left wrist. Behind, tunny downwards.

Brit. Mus. (two), (*a*), Num. Chron., N.S., xvi., Pl. VIII. 17, 247 grs. [Pl. IV. 16], (*b*), l. c., Pl. VIII. 18., 248.2. W. G. (*c*), 247. [Pl. IV. 17]. Paris (*b*), 246.4. Berlin (Prok.-Ost.), 246.8. Waddington, 248.3.

(*a*), (*b*), (*c*), diff. dies.

Engr. Sestini, Stat. Ant., Pl. V. 7. Mionnet, Pl. XLIII. 3. Num. Chron., N.S., xvi., Pl. VIII., 17, 18. Gardner, Types, Pl. X. 5.

Noted. Mionnet, ii., p. 527, No. 77.

Hecta. Vienna, 40.6 grs. [Pl. IV. 18]. Iversen, 41.5, (found at Kertch).

Engr. Eckhel., Mus. Cæs. Vind. Sylloge., i., p. 76, Tab. VII. 5. Sestini, Stat. Ant., Pl. V. 12.

Noted. Mionnet, Suppl. v., p. 303, No. 119.

94. Similar to the last, but the warrior kneels to left, and the tunny is upwards.

W. G. (a), 245·9 grs. (Bompois sale, No. 1,373). [Pl. IV. 19]. Löbbecke (b), 248·7. [Pl. IV. 20]. St. Pet. (two), 246·32, (c), 247.
(a), (b), (c), diff. dies.

Noted. Zeit. für Numis., x. (1882), p. 76, No. 25.

Jason and the Argonauts are prominent actors in the mythical history of Cyzicus, and the warrior represented on this and the preceding coin may be Jason or one of his band.

95. Male figure, wearing cloak, trousers, and boots, seated right on tunny; over his left wrist hangs a strung bow, and in his right hand he holds an arrow, which he appears to be examining.

St. Pet. 247 grs. [Pl. IV. 21].

This stater is of very good work, and of more than common interest. The dress of the warrior is characteristic of a Scythian, and corresponds with frequent representations of those people on vases and other works. It may be compared with the two staters last described (Nos. 93, 94), where a Greek warrior is engaged upon the same operation with his arrow, and holds the bow in the same position.

The subject appears to be another link between Cyzicus and Panticapæum and the Hyperborean regions, but it may also have its place on the coinage of Cyzicus in connection with the Argonautic expedition.

96. Male figure, naked, kneeling left on tunny, holds a lance(?) in right hand and in his left a sword, point upwards, held by the blade, the hilt projecting beyond the hand.

Berlin, 247·3 grs. [Pl. IV. 22].

97. Harpy, standing left and holding a tunny by the tail in right hand; two objects like vine tendrils project from the back of the head.

W. G., 245·8 grs. (Whittall sale, 1884, No. 752). [Pl. IV. 23]. Waddington, 247·5.

Hecta. Imhoof, 41 grs. [Pl. IV. 24].

Engr. Millingen, *Sylloge*, Pl. III. 39. De Luynes, *Choix*, Pl. X. 8.

The peculiar object which projects from the back of the head is also found attached to the head of the Sphinx. The very early representations of that creature on ivory combs and plaques discovered at Spata have the head covered with the mitre, to which, at the back, are attached short plumes (?), with curled ends, and beyond them a long streamer, which seems to float in the wind.⁴⁴ It may be remarked that it is only where the whole creature is represented on the staters and hectæ that these appendages are found; where only the forepart of Harpy or Sphinx, Nos. 98, 102, forms the type, they are absent.

98. Forepart of Harpy to left, holding a tunny by the tail in right hand.

Hirsch., 249·7 grs. [Pl. IV. 25].

Hecta. Paris, 30·2. [Pl. IV. 26].

Twelfth. Paris, 20·2 grs.

Engr. Dumersan, *Cat. Allier*, Pl. XII. 6. Mionnet, *Suppl.*, ix., Pl. X. 4.

Noted. Mionnet, *Suppl.*, v., p. 303, No. 122, but he calls it a Sphinx and places it to right. His reference is to Dumersan.

⁴⁴ Bull. de Corresp. Hellén., vol. ii., Pl. XVII. 1, 2. Pl. XVIII. 1.

99. Sphinx standing to left on tunny, the right fore-paw raised ; a plume or other object with two curled ends projects from the back of head.

Brit. Mus. (a), 243.4 grs. [Pl. IV. 27]. Waddington (Dupré sale), 245.8. W. G. (a), 246.3. Weber (a).
(a) same die.

Engr. Num. Chron., N.S., xvii., Pl. VI. 7.

Noted. Brandis, p. 400, under Chios, who appears to confuse the standing and seated Sphinx.

Hecta. St. Pet. (a), 41.5 grs. [Pl. IV. 28]. Berlin (Prok.-Ost.), 41.5. Imhoof (b).
(a), (b), diff. dies.

Engr. Dumersan, Cat. Allier, Pl. XVI. 1. Sestini, Stat. Ant., Pl. IX. 8. Mionnet, Pl. XLIII. 11. Prokesch-Osten, Ined., 1854, Pl. IV. 6.

Noted. Mionnet, iii., p. 265, No. 1. Brandis, p. 400.

The Sphinx is the long-continued coin-type of Chios, and its occurrence on the staters and hectæ of Cyzicus may be nothing more than the reproduction on its own coinage of the type of another state. In connection, however, with Dionysus the Sphinx would not be one unlooked for among the many and varied types of the Cyzicene coinage.

- 99*. Sphinx, with pointed wing, standing left, right fore-paw raised. Beneath, tunny left.

W. G., 246.4 grs.

This stater formed one of the coins found at the Piræus in 1882, but it became known to the author too late to be figured in the plates.

100. Sphinx seated left on tunny, the right fore-paw raised ; hair represented by dots ; it has the usual projection behind the head.

Paris (De L.), 247 grs. [Pl. IV. 29].

Engr. Rev. Num., N.S., vol. i., Pl. I. 8.

Hecta. Paris (two), 41 grs., 41. Munich (a), 41. Six (a), 40·7. (Ivanoff sale, No. 160). W. G. (a), 41·8.
(a) same die.

Twelfth. Gotha; 20·2 grs.

101. Sphinx seated, head facing, with two bodies; the usual projection behind the head.

Paris, 48·4 grs. [Pl. IV. 30].

Engr. Brönsted, Voy. en Grèce, vol. ii., p. 153, vign. xli.
Mionnet, Suppl., ix., Pl. X. 5.

Noted. Brandis, p. 400, under Chios.

Cousinéry (Voy. dans la Macédoine, i., p. 99) describes a terra-cotta with a similar representation, found at Pella. It is possible that this treatment of the Sphinx is merely a way of representing it as seen facing, arising from the difficulty of depicting a figure in that position. A somewhat similar mode is found on the archaic figures of Nike flying, on Sicilian coins, where the wings are spread on each side of the body instead of appearing behind it.

102. Forepart of Sphinx to left, the right fore-paw raised.
Beneath, tunny left.

Brit. Mus. (a), 248·6 grs. (Subhi sale, No. 762). [Pl. IV. 31]. Paris (b), 248·5. W. G. (b), 246·6.
(a), (b), diff. dies.

Engr. Rev. Num., N.S., vol. i., Pl. I. 5.

Noted. Brandis, p. 400, under Chios.

Hecta. W. G., 40·1 grs. (Whittall sale, 1884, No. 762).

103. Lion standing left on tunny, with closed mouth, and tail turned outwards.

W. G. (a), 247·1 grs. (Von Rauch coll.). [Pl. IV. 32].
St. Pet. (a), 245·8. Leake (b), 246·5.
(a), (b), diff. dies.

Engr. Head, Hist. Num. Fig. 273.

Noted. Leake, Num. Hellen. Suppl., p. 44.

The lion or lioness appears under various aspects upon the staters. The animal is represented whole or dimidiated, to use heraldic language, walking, sitting, devouring his prey and breaking a weapon with his teeth, and winged. It occurs usually alone, but also as forming part of a subject, and sometimes there is merely the head.

The lion is connected in so many ways with Hellenic mythology, and especially where it became influenced by Asiatic cults, that it is, perhaps, impossible to associate any individual coin-subject with a particular myth, except in connection with Heracles. The lion as a sun-symbol, and so associated with the god of day and light, would be a quite natural type on the coinage of Cyzicus, and to this we may, perhaps, attribute its frequent occurrence. In connection with Cybele the lion may equally be expected on the coins of a state which by its position was brought into intimate relation with the worship of the goddess. It may also have reference to the cult of As-tarte-Aphrodite, who, however, herself is, more or less, to be identified with Cybele.

104. Lion standing left on tunny, with open mouth and tail turned inwards.

Paris, 246·8 grs. [Pl. IV. 33]. Copenhagen, 245·7, (Thomas sale, No. 1915; Huxtable sale, No. 149).

Diff. dies.

Engr. Sestini, Stat. Ant., Pl. IV. 16. Mionnet, Pl. XLIII. 7.

Noted. Mionnet, ii. p. 527, No. 76.

105. Lion, with open mouth, seated left on tunny, the right fore-paw raised.

Brit. Mus., 246·3 grs. [Pl. IV. 34].

Hecta. Brit. Mus. (a), 41 grs. [Pl. IV. 35]. Paris (a), 41. Paris (De L.) (two), 41·7 (b), 41·4. Berlin. Munich (b), 41·4. St. Pet., 41·7. Leake, 41·9. W. G. (a), 41·2. Prince of Windisch-Grätz, 41·8.
(a), (b), diff. dies.

Engr. Sestini, Stat. Ant., Pl. IV. 19, 20.

Noted. Mionnet, Suppl., v. p. 302, Nos. 115, 116.
Leake, Num. Hell. Suppl., p. 44.

Twelfth. Brit. Mus., 21·2 grs.

Engr. Sestini, Stat. Ant., Pl. IV. 21.

Noted. Mionnet, Suppl., v. p. 302, No. 117.

106. Lioness standing left on tunny, the right fore-paw raised, the tail turned up over back.

Weber (a), 248·9 grs. [Pl. IV. 36]. Berlin (b), 248·8.
Hoffmann (fruste), 230.
(a), (b), diff. dies.

Noted. Königl. Münz-Kab. (1877), No. 101.

Hecta. Munich, 30·8 grs. St. Pet., 40·5. Hirsch, 39·4.
W. G., 40·2 (Whittall sale, 1884, No. 760).
All diff. dies.

Engr. Sestini, Stat. Ant., Pl. VIII. 16.

107. Lion to left, apparently devouring his prey. Beneath, tunny left.

Brit. Mus. (a), 247 grs. [Pl. V. 1]. Paris (De L.), 246·5.
W. G. (a), 246·6.
(a), same die.

Engr. Sestini, Stat. Ant., Pl. IV. 18. Num. Chron., N.S., xvii., Pl. VI. 6.

Noted. Mionnet, Suppl., v. p. 302, No. 113. Brandis, p. 403.

Hecta. Paris (De L.) (a), 41·3 grs. Berlin (two), Fox, 41, Prok.-Ost., 40·8. Vienna (b), 40·4. Leake (b), 40·7.
(a), (b), diff. dies.

Noted. Brandis, p. 403.

Twelfth. Paris (a), 20·1 grs. Vienna, 22·7. St. Pet. (a), 24.

(a), same die.

108. Lion standing to right, with tail between his legs, holds the hilt of a weapon with his right fore-paw, and is biting the blade, which projects beyond his mouth. Beneath, tunny right.

W. G., 245.4 grs. [Pl. V. 2]. St. Pet., 245.7.
Diff. dies.

Engr. Rev. de la Num. Belg., vol. ii., Pl. V. 3.

Hecta. Imhoof, 39.6 grs.

The weapon held by the lion is curved, and has more the appearance of the harpa of Perseus than of a sword. Mr. Burgon, the author of the Catalogue of the Thomas Collection, where a similar coin formed lot 1914, was of the opinion that it was the harpa, but, acknowledging the unlikeliness of such a representation, withheld his judgment until another coin turning up, might give a better impression of the die. It is unfortunate that upon neither of the two coins at present known to me, is the end of the weapon quite distinct, still there is sufficient shown to make it almost certain that it is the harpa, a fact which would connect it with the myth of Perseus.

109. Forepart of lioness to left, apparently devouring her prey. Behind, tunny upwards.

Brit. Mus. (a), 247.8 grs. (Subhi sale, No. 1150). [Pl. V. 3]. Imhoof (b), 248.3. [Pl. V. 4]. W. G. (b), 247.7. Lambros, in 1885 (two).
(a), (b), diff. dies.

Engr. Imhoof-Blumer, Choix, Pl. III. 101.

Hecta. Berlin, 40.2 grs. Munich, 39.7. Imhoof, 39.5.
All diff. dies.

Engr. Sestini, Stat. Ant., Pl. IV. 22.

Noted. Mionnet, Suppl., v. p. 304, No. 123.

Twelfth. Paris (De L.). Vienna (a), 22.5 grs. St. Pet. (b), 20.1. Six (c).
(a), (b), (c), diff. dies.

Engr. De Luynes, Choix, Pl. X. 12.

On the hecta and twelfth the object held in the mouth is much like a bone. The type is found on silver coins, probably of Phocæa, many of which have been found in Southern Italy and near Marseilles.

110. Forepart of lion to left, with open mouth, the head turned back. Behind, tunny downwards.

W. G., 248·3 grs. [Pl. V. 5].

111. Forepart of lioness to left, the head turned back. Behind, tunny.⁴⁵

Berlin, 41 grs. Waddington, 40·8.

112. Head and neck of lioness to left, with paw. Behind, tunny.

Waddington, 20·1 grs.

113. Lion's scalp, facing. Beneath, tunny left.

W. G., 248·4 grs. (Whittall sale, No. 1044). [Pl. V. 6].
Brit. Mus. 250·5.

Both the same die.

Engr. Num. Chron., N.S., xvi., Pl. VIII. 26. Brit. Mus. Guide, Pl. X. 13.

Hecta. Brit. Mus. (a), 41·2 grs. Paris (two), 42·4, (a), 41·5. Berlin (three), (Fox, two), (Prok.-Ost.). Six (a).

(a), same die.

Engr. Sestini, Stat. Ant., Pl. IV. 6. Mionnet, Suppl., ix., Pl. X. 9.

Noted. Mionnet, vi. p. 614, No. 9. Brandis, p. 401, under Samos.

A copy of the ordinary type of Samos.

⁴⁵ I was not acquainted with this hecta, nor with the twelfth, No. 112, in time to enable me to include them in the plates.

114. Head of lion, with open mouth to right. Behind, tunny downwards.

Munich, 41·3 grs. [Pl. V. 7].

Noted. Mionnet, vol. vi. p. 614, No. 7.

115. Head of lioness, mouth closed, to left. Behind, tunny upwards.

Imhoof (*a*), 250 grs. [Pl. V. 8]. Brit. Mus. (*b*), 248.
Paris, 247. W. G. (*b*), 248·4.
(*a*), (*b*), diff. dies.

Engr. Num. Chron., N.S., xvii., Pl. VI. 10.

Noted. Brandis, p. 404.

Hecta. Paris, 40·1 grs. Paris (De L.) (two), 40, 39.
Berlin (Prok.-Ost.). Six, 41·3. Moore, 39·5.
Weber, 40·6 (Whittall sale, 1884, No. 1002).

Noted. Brandis, p. 404.

116. Head of lioness, facing. In field to left tunny downwards.

Brit. Mus., 41 grs. [Pl. V. 9].

117. Forepart of winged lioness to left. Behind, tunny upwards.

Paris, 247·6 grs. [Pl. V. 10].

Engr. Dumersan, Cat. Allier, Pl. XII. 3.

Noted. Mionnet, Suppl., v. p. 300, No. 104. Brandis, p. 404.

It will be seen from the types on other coins that winged creatures occur frequently on the coinage of Cyzicus. Here it is a winged lioness, and there are bulls, boars, and dogs, without taking Pegasus into account. These representations are no doubt Oriental in their origin, and probably denote motion, in connection with Solar worship.

118. Head of lion to left, head of ram to right, joined at the neck. Beneath, tunny left.

Löbbecke, 247·4 grs. [Pl. V. 11]. W. G., 247·6.

Diff. dies.

Noted. Zeit. für Numis. (1882), vol. x. p. 76, No. 24.

Twelfth. Paris (De L.), 20·5 grs.

Engr. Ann. dell' Inst. Archeol., vol. xiii., p. 150, Mon. Pl. XXXV. 21.

A type similar in some respects to the early Lydian stater, with the forepart of lion and bull conjoined in the same manner, which are supposed to symbolise the sun and moon.

119. Chimæra seated to left, with open mouth, and tail ending in a serpent's head. Beneath, tunny left.

Brit. Mus., 254·1 grs. [Pl. V. 12].

The chimæra on this stater does not seem to have the head of a lion, as the monster is ordinarily represented, but on the stater next to be described that feature is quite apparent.

The chimæra appears upon an early electrum coin, attributed by Mr. Head (Num. Chron., N.S., vol. xv. p. 285) to Zeleia, a town which at one time was included within the territory of Cyzicus. Though the ordinary type of Sicyon, it is scarcely likely that this is one of the cases where Cyzicus reproduced a subject from the coinage of another state. As connected with the Bellerophon myth, we might expect to find it upon the Cyzicene coinage.

120. Chimæra standing to left, with open mouth. Beneath, tunny left.

Imhoof, 247·2 grs. [Pl. V. 13].

Engr. Imhoof-Blumer, Choix, Pl. III. 98.



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Noted. Imhoof-Blumer, *Monn. Grecq.*, p. 241, No. 66.

Hecta. Paris, 40 grs. [Pl. V. 14].

Engr. Sestini, *Stat. Ant.*, Pl. V. 19. Mionnet, Pl. XLIII. 8. Dumersan, *Cat. Allier*, Pl. VI. 14. Lajard, *Culte de Vénus*, Pl. III., B. 20.

Noted. Mionnet, *Suppl.*, iv. p. 160, No. 1047. *Num. Chron.*, vi. p. 136. Brandis, p. 404.

121. Bull walking left. Beneath, tunny left.

Brit. Mus. (a), 248·5 grs. [Pl. V. 15]. Paris, 247. St. Pet. (a), 246·8. Imhoof (a), 247. Weber, 247·8 (Whittall sale, 1884, No. 751). W. G. (b), 247·3. Jones. Hoffmann, 246·9.
(a), (b), diff. dies.

Engr. *Num. Chron.*, N.S., xvi., Pl. VIII. 28. Brit. Mus. Guide, Pl. X. 11.

Noted. *Num. Vet. R. P. K.*, p. 95. *Num. Chron.*, vi. p. 150. Leake, *Num. Hell. Asiat. Greece*, p. 50. Brandis, p. 388, under Chalcedon.

Hecta. Berlin (Fox), 41 grs.

Twelfth. Berlin, 21·3 grs.

Brandis classes this stater to Chalcedon, but the presence of the tunny compels it to be given to Cyzicus. The bull occurs on the coinage of other cities as well as of Byzantium and Chalcedon, and Cyzicus may have taken this type from any one of them. As has already been noticed in the introduction, Dionysus had a statue at Cyzicus in the form of a bull.

122. Bull butting to right. Beneath, tunny right.

Brit. Mus. (a), 247·1 grs. [Pl. V. 16]. W. G. (a), 247 (Bompois sale, No. 1362). Weber (b), 247·8. Lambros (b), 247.
(a), (b), diff. dies.

Engr. *Num. Chron.*, N.S., xvi., Pl. VIII. 27.

A copy of the ordinary type of Thurium. We have an instance of Cyzicus taking a coin-type from a city quite as far distant in No. 85, where a coin of Syracuse served for the model.

123. Ox kneeling or lying down to left. Beneath, tunny left.

Brit. Mus., 40 grs. [Pl. V. 17].

Engr. Sestini, Stat. Ant., Pl. IV. 24.

Noted. Mionnet, Suppl., v. p. 304, No. 124.

124. Head of bull to left. Beneath, tunny left.

Brit. Mus., 247·5 grs. [Pl. V. 18].

Engr. Num. Chron., N.S., xvi., Pl. VIII. 29.

125. Forepart of winged bull galloping to left. Beneath, tunny left.

W. G., 246·3 grs. [Pl. V. 19]. Brit. Mus., 247·5. Lam-bros in 1885.

All from the same die.

Twelfth. Paris (De L.), 20·1 grs.

Engr. Ann. dell' Inst. Archeol., vol. xiii., Pl. XXXV. 22.

126. Horse galloping to left, reins hanging loose. Beneath, tunny left.

St. Pet., 246·5 grs. [Pl. V. 20]. Berlin (Prok.-Ost.), 247.

Engr. Rev. Num., N.S., vol. ix., Pl. I. 1.

Poseidon, to whom the horse was sacred, occurs on the Cyzicene staters, and it is probable that the horse may have been used as a coin-type in connection with him. It may, however, have been introduced as a copy of the coinage of Maronea, where it had been, in alliance with the vine, the long-continued badge of that city.

127. Pegasus flying to right. Beneath, tunny right.

W. G. (a), 247·1 grs. (Bompois sale, No. 1368) [Pl. V. 21]. Brit. Mus. (a), 247·7. Paris (b), 246·9.
(a) (b), diff. dies.

Engr. Num. Chron., N.S., xvi., Pl. VIII. 23.

A type connected with the myth of Bellerophon; another type, the chimæra (Nos. 119, 120) equally belonging to the same legend, has already been described. The stater may have been copied from the long-continued and widely diffused coins of Corinth and her colonies, with which state Cyzicus, in its commercial relations, must necessarily have been in frequent contact. The worship of the Lycian hero had, however, at an early period spread into the neighbourhood of Cyzicus, which was, moreover, in many ways connected with Lycia, and we may perhaps regard the type as of local origin.

128. Forepart of winged horse to left. Beneath, tunny left.

Brit. Mus., 40·9 grs. [Pl. V. 22]. Paris (De L.)
Diff. dies.

Engr. Sestini, Stat. Ant., Pl. VI. 14.

Noted. Num. Vet. R. P. K., p. 138. Mionnet, Suppl.,
v. p. 369, No. 548.

Twelfth. Brit. Mus., 19·2 grs.

The forepart of a winged horse was the badge or arms of the adjacent city of Lampsacus, and it occurs on the coinage of other towns of the district. It would, therefore, be strange if it was not found on the currency of so important a neighbouring state as Cyzicus.

It has, however, been suggested to me by Professor Gardner that the animal is not a horse but a deer or antelope, and he thinks he sees some indication of horns. It

is certainly not a good representation of a horse, and has more of the form of the deer, both in the slenderness of the neck and the length of the head. If a stater of the same type should come to light the difficulty might be solved.

129. Ass standing left on tunny.

W. G., 246·2 grs. (Whittall sale, 1884, No. 757),
[Pl. V. 23].

A Dionysiac type. It occurs upon many of the coins of Mende.

130. Ram standing to left on tunny.

W. G. (a), 247·5 grs. [Pl. V. 24]. Brit. Mus. (b), 247·4.

Weber (b), 247. (Subhi sale, No. 1149.) Lam-
bros (b).

(a), (b), diff. dies.

Engr. Num. Chron., N.S., xvi. Pl. VIII. 30.

Noted. Brandis, p. 404.

Hecta. Paris (De L.), 41·3 grs.

Engr. Sestini, Stat. Ant., Pl. VIII. 4.

Noted. Brandis, p. 404.

The ram, which occurs on others of the staters, may have found a place there in connection with the myth of Helle. On a gold stater of the neighbouring state of Lampsacus Helle is represented riding on the ram. The Argonautic expedition is so intimately connected with the history of Cyzicus that we may expect to find incidents of the story recorded on the Cyzicene coinage. The sacrifice of the ram by Phrixus to Zeus Phyxius, and the subsequent presentation of its golden fleece to Aeetes, may be considered the starting point of the expedition.

It is, perhaps, scarcely to be expected that the ram should occur on the coinage of maritime Cyzicus as a symbol of Apollo, the shepherd god (*καρνείος*), though in other relations he is frequent on the Cyzicenes.

131. Ram, with head turned back, kneeling left on tunny.

Brit. Mus., 247·6 grs. [Pl. V. 25]. W. G., 249. Lambros in 1885.

All the same die.

Engr. Sestini, Stat. Ant., Pl. VIII. 5. Brit. Mus. Guide, Pl. X. 9.

Noted. Num. Vet., R. P. K., p. 117.

132. Forepart of ram running to left. Behind, tunny upwards.

W. G., 248·3 grs. [Pl. V. 26]. Weber, 249·2.

Both the same die.

133. Goat kneeling left on tunny.

Copenhagen 247 grs. (Ivanoff sale, No. 191), [Pl. V. 27]. W. G. 246·3.

Diff. dies.

Noted. Brandis, p. 404.

Hecta. Berlin (Prok.-Ost.), 41·3 grs. [Pl. V. 28].

It is probably in connection with Dionysus that the goat occurs on the Cyzicene coins, though it may have been placed there as sacred to Hermes.

134. Head of goat to left. Behind, tunny upwards.

Bunbury (*a*), 247 grs. (Dupré sale). [Pl. V. 29].
 Brit. Mus. (*b*), 247·6. Paris (De L.), 249. St. Pet., 247. W. G. (*c*), 247·5. (Bompois sale, No. 1361). Lewis, 248·6. Löbbecke (*d*), 249·5. Hoffmann (two), 247, 247·2. Lambros in 1885 (two).

(*a*), (*b*), (*c*), (*d*), diff. dies.

Engr. Mionnet, Suppl., v., Pl. II. 1. Num. Chron., N.S., xvii., Pl. VI. 11.

Noted. Num. Vet., R. P. K., p. 106. Brandis, p. 404.

Hecta. Berlin (Fox), 41·4 grs. Six, 41·7, (Ivanoff sale, No. 154.)

Twelfth. Brit. Mus., 19·9 grs. Paris, 20·1.

Noted. Brandis, p. 404.

185. Boar walking left on tunny.

Vienna, 246 grs. [Pl. V. 30]. St. Pet., 247.

Both same die.

Hecta. Imhoof (*a*), 41 grs. [Pl. V. 31]. Paris (De L.) (*b*), 40·8. Berlin, 41·8. W. G. (*b*), 39·7.

(*a*), (*b*), diff. dies.

Noted. Brandis, p. 391, under Methymna.

The boar occurs on the early coins of Methymna.

186. Sow walking left on tunny.

Munich, 248·8 grs. [Pl. V. 32].

Engr. Sestini, Stat. Ant., Pl. IV. 27.

Noted. Mionnet, Suppl. v., p. 304, No. 125. Brandis, p. 391, under Methymna, and he calls the animal a boar.

Hecta. Brit. Mus. (*a*), 41 grs. Paris (*a*), 41·6. Hunter. Leake.

(*a*) same die.

Engr. Hunter, Pl. LXVI. 2. Sestini, Stat. Ant., Pl. IV. 28. Brit. Mus. Guide, Pl. X. 15.

Noted. Mionnet, vi., p. 615, No. 14. Suppl. v., p. 304, No. 126. Suppl. ix., p. 231, No. 27. Leake, Num. Hellen. Asiat. Greece, p. 50. Brandis, p. 405.

Twelfth. Waddington, 20·2 grs.

The sow is found on one of the early unattributed staters of the Phœnician standard, which have on the reverse a square incuse, divided into four parts by thin raised lines.

137. Forepart of winged boar swimming to left. Beneath, tunny left.

Paris (a), 247·7 grs. [Pl. V. 33]. Brit. Mus. (b), 247·8.
(Subhi sale, No. 764). W. G. (b), 247·6.
(a), (b), diff. dies.

Engr. Mionnet, Suppl. v., Pl. II. 2.

The distinctive type of many silver coins attributed to Clazomenæ. It is found on an early electrum stater of the Phœnician standard, also attributed to Clazomenæ, of which this stater may be a copy.

138. Dog standing left on tunny, right fore-paw raised.

Paris, 188·7 grs.⁴⁶ [Pl. V. 34]. St. Pet., 237.
Diff. dies.

Engr. Sestini, Stat. Ant., Pl. VIII. 13. Mionnet, Pl. XLIII. 2.

Noted. Mionnet, iii., p. 176, No. 816. Brandis, p. 403.

Hecta. Brit. Mus. (two) 41·2 grs., 40·6. [Pl. V. 35]. Paris, 40·1. Berlin (three) Fox, 40; Prok.-Ost. (two) 42·8, 41·5. Copenhagen. St. Pet. W. G., 41·8. Six (two), 42·3, 41 (Subhi sale, No. 767).

Noted. Brandis, p. 403.

Twelfth. Paris. Six, 20·8 grs.
Diff. dies.

Engr. Sestini, Stat. Ant., Pl. IV. 17.

Noted. Mionnet, Suppl. v., p. 302, No. 114.

In the Allier de Hauteroche Collection (Pl. XIV. 12) was a silver coin, attributed to Colophon, precisely like the stater. It has on the reverse a quadripartite square incuse. It is engraved Sestini, Stat. Ant., Pl. VIII. 15. This, possibly, may be an instance where Cyzicus, as in other

⁴⁶ The weight is much below the standard, and the coin is probably plated.

cases, adopted the type of another state; here the town was Colophon.

139. Forepart of dog to left, head turned back. Behind, tunny upwards.

Imhoof (*a*), 34 grs. [Pl. V. 36]. Munich, 41.8. Six (*b*), 41.8 (Ivanoff sale, No. 155).

(*a*), (*b*), diff. dies.

Engr. Sestini, Stat. Ant., Pl. VIII. 14.

140. Winged dog, crouching to left on tunny, head turned back.

W. G., 249.8 grs. [Pl. VI. 1].

Hecta. Munich (*a*), 41.9 grs. [Pl. VI. 2]. Paris (*b*), 41.8. Berlin (plated), 28.8. Waddington, 39.7.

(*a*), (*b*), diff. dies.

Engr. Sestini, Stat. Ant., Pl. IX. 4.

141. Cerberus standing to left. He has two heads with a collar round each neck, and the tail ends in the head of a serpent. Beneath, tunny left.

Brit. Mus. (*a*), 250.4 grs. [Pl. VI. 3]. W. G. (*b*), 246.8. One sold by Sotheby and Wilkinson, Feb. 19, 1887, 250.4 grs. A second sold by S. & W., Mar. 22, 1887, 240 grs.

(*a*), (*b*), diff. dies.

Engr. Num. Chron., N.S., vol. xvi., Pl. VIII. 24.

Hecta. Paris, 41 grs. St. Pet. (*a*), 42.4. Six (*a*), 40.8. (Hamilton sale, 1867).

(*a*) same die.

Noted. Brandis, p. 404.

Cerberus, as overpowered and chained, when Theseus was delivered from Hades, forms an incident in the myth of Heracles, with which several of the types on the Cyzicene coins are connected. Mr. Head (Num. Chron., N.S., xvi. p. 284) suggests that the type was derived from

Cimmerium, anciently called Cerberion, with which district Cyzicus was in constant commercial intercourse.

142. Animal with long tail standing to left on tunny.

Twelfth. Brit. Mus., 20·7 grs. [Pl. VI. 4].

Noted. Num. Vet., R. P. K., p. 3.

The animal, which has much the appearance of a squirrel, is no doubt a fox, and was placed on the coin in connection with Bassareus, the Lydian Dionysus, to whom the animal was sacred. On the reverses of early electrum staters and half-staters attributed to Miletus and to Lydia (Head, *Hist. Num.* pp. 503, 545), there is a figure of a running fox within an oblong incuse, between two small incuse squares containing respectively a stag's head and a cross with pellets at the extremities.

143. Griffin, with rounded wings, standing left on tunny, the right fore-paw raised.

W. G. (*a*), 247·2 grs. [Pl. VI. 5]. Brit. Mus. (*a*), 245·2. Paris (De L.) (*b*), 247·8. Hague (*b*), 247·4. Waddington (Northwick sale, No. 956). Weber, 244·2 (Whittall sale, 1884, No. 750). Löbbecke, 246·9. Lambros.
(*a*), (*b*), diff. dies.

Engr. Sestini, *Stat. Ant.*, Pl. IX. 1. Num. Chron., N.S., xvi., Pl. VIII. 25.

Noted. Num. Vet., R. P. K., p. 154. Brandis, p. 398, under Teos.

Hecta. Berlin, 40·1 grs.

There is no type, except the lion, which occurs so frequently on the staters as the griffin. And in connection with Apollo, the father of its mythical founder, we might

expect it to be common. As the guardian of the gold in the land of the Hyperboreans, periodically visited by Apollo, the griffin might again find a place on the Cyzicene coinage, and with more than ordinary fitness, as the gold used at Cyzicus came principally, through Panticapæum, from the region where the Hyperboreans were supposed to dwell. The griffin, as the common type, the badge of Teos and Abdera, its colony, both of them not far distant and wealthy states, was also to be expected on the coins of a city which so frequently adopted the monetary subjects of other states. Though, probably, used on the coinage of Cyzicus in connection with Apollo, the griffin was also a Dionysiac symbol. Types having reference to Dionysus and his worship are very common on the staters, and it is evident that he was held in especial reverence in Cyzicus.

144. Griffin, with rounded wing, seated to left on tunny, the right fore-paw raised.

Brit. Mus., 248·8 grs. [Pl. VI. 6]. W. G., 247·1, (Subhi sale, No. 766). Lambros in 1885.

All the same die.

Engr. Num. Chron., N.S., vol. xvii., Pl. VI. 8.

145. Griffin, with pointed wing, standing to left on tunny, the right fore-paw raised.

Berlin, 39·7 grs. [Pl. VI. 7].

146. Griffin, with pointed wing, seated left on tunny.

Brit. Mus., 247·5 grs. [Pl. VI. 8].

Engr. Num. Chron., N.S., xvii., Pl. VI. 9.

Hecta. Munich, 39·6 grs. [Pl. VI. 9].

Engr. Sestini, Stat. Ant., Pl. IX. 2.

147. Griffin to left on tunny, holding head of spear in mouth.

Mionnet, Suppl. v., p. 202, No. 112, (Cab. de feu M. d'Hermant).

I have been unable to trace this coin, and I think it probable that it is wrongly described. It is the common type on coins of Panticapæum, and one which might be expected to occur on the coinage of Cyzicus, supposing that the coin as described ever existed.

148. Forepart of griffin to left, with rounded wing. Beneath, tunny left.

W. G. (*a*), 246·6 grs. [Pl. VI. 10]. Hoffmann (two), (*b*), 246·8.

(*a*), (*b*), diff. dies.

Hecta. Munich, 41 grs.

Engr. Sestini, Stat. Ant., Pl. IX. 3.

Noted. Mionnet, vi., p. 616, No. 26.

Twelfth. St. Pet., 18·7 grs.

Noted. Mionnet, vi., p. 616, No. 27.

The griffin on this stater is represented with the head of a lion; on all the others the head is the ordinary one of an eagle or kindred bird.

149. Forepart of griffin to left, with rounded wings. In front, tunny upwards.

Brit. Mus., 250 grs. (Subhi sale, No. 209). [Pl. VI. 11].

150. Griffin's head and neck to left, on each side a tunny upwards.

Six, 41·8 grs. (Gréau sale, No. 1652). [Pl. VI. 12].

151. Eagle, with wings raised, to left on tunny and apparently about to tear it.

W. G., 246·1 grs. [Pl. VI. 13].

A type very similar, except that the hare, &c., is replaced by the tunny, to one frequent on the coins of

Elis. An eagle standing on a dolphin is the ordinary type of Sinope.

152. Eagle facing, but flying to right, behind, tunny downwards, all upon disk or within a circle.

Paris, 247 grs. [Pl. VI. 14]. Berlin, 246·9.
Diff. dies.

Engr. Rev. Num., N.S., ix., Pl. I. 6.

The disk probably represents the sun, and if so the type is connected with Helios, the sun-god.

153. Eagle, with head turned back, standing to right on tunny, all upon disk.

Berlin, 247·9 grs. [Pl. VI. 15].

Engr. Rev. Num., N.S., ix., Pl. I. 2.

154. Eagle standing to right upon tunny; above it is a second tunny whose head is covered by that of the eagle.

Six, 40·8 grs. (Subhi sale, No. 767). [Pl. VI. 16].

Twelfth. W. G., 20·8 grs. [Pl. VI. 17]. Kotschoubey Coll., 20·2.

Engr. De Koehne, Mus. Kotschoubey, Pl. I. 1.

155. Forepart of cock, with rounded wing, to left. Beneath, tunny left.

Brit. Mus., 248·2 grs. (Subhi sale, No. 765). [Pl. VI. 18].

The bird commonly offered in sacrifice to Asclepius was a cock, and the type may have reference to the worship of that god, whose head occurs on hectæ of Phocæa. The cock as the bird of dawn is the common type of Himera, but it does not appear probable that there is any copying here of the Sicilian coin. On the coins of Dardanus in Troas the cock is of frequent occurrence, though commonly it is



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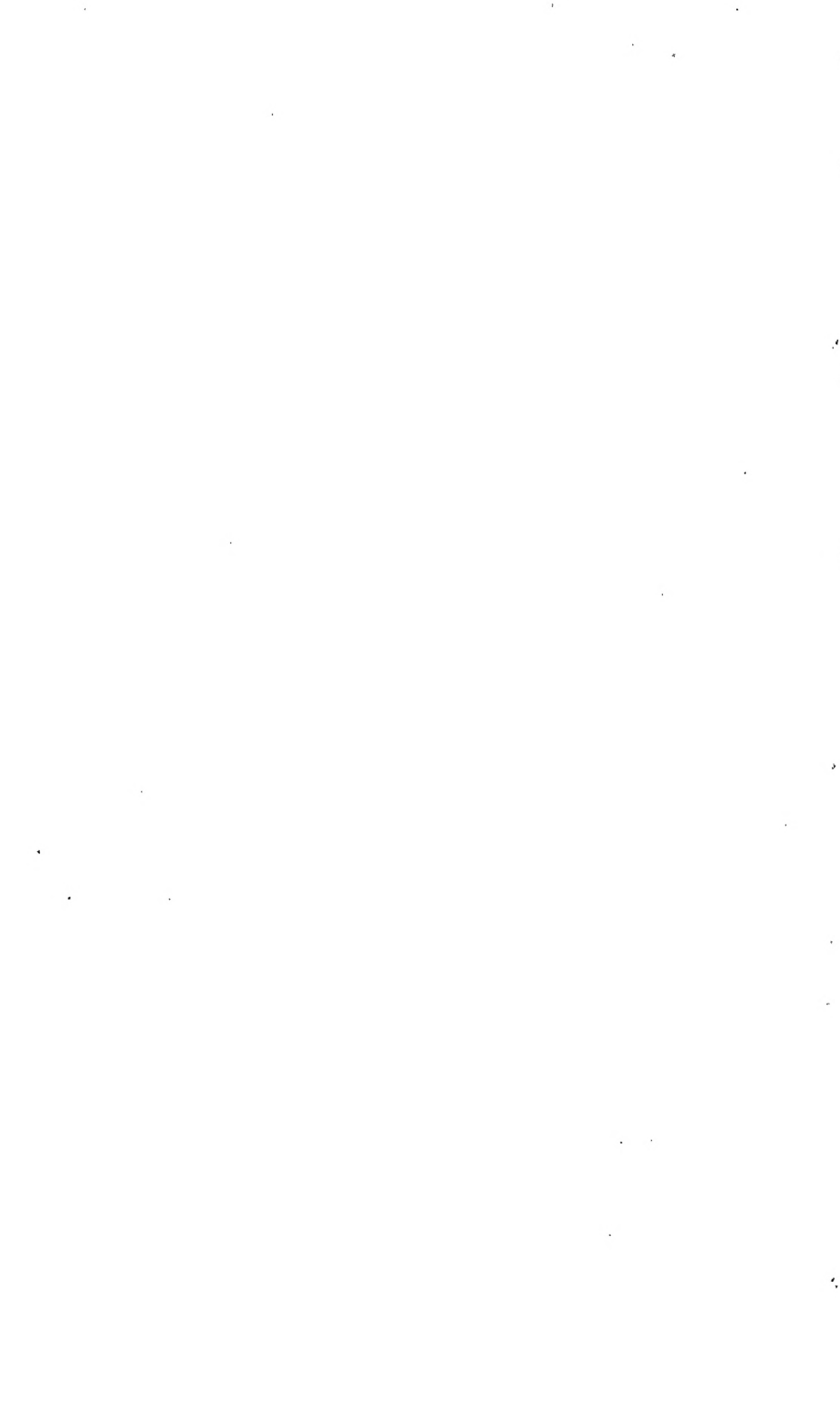
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a fighting cock. It is found, however, in a peaceful attitude upon an early electrum stater of the Phœnician standard, as well as upon silver coins of a little later date.

156. Head of fish, with spike, to left. Beneath, head of cock turned towards the fish-head.

Imhoof, 42 grs.

This hecta, one of the class with the fish-head, probably representing the whole tunny, came into Dr. Imhoof-Blumer's collection too late to be included in the plates. It was sent to him from Trebizond.

157. Dolphin to left. Beneath, tunny left.

Brit. Mus. (two), 41·6 grs., 40·4. [Pl. VI. 19].

Diff. dies.

Noted. Num. Vet., R. P. K., p. 141.

Twelfth. Brit. Mus. (two), 20·7 grs. (*a*), 20·5 (*b*). W. G. (*a*), 20·8.

(*a*), (*b*), diff. dies.

A type connected with Poseidon, who on the stater, No. 6, holds a dolphin on his hand.

158. Crab holding in its claws the head of a fish to left. Beneath, small tunny left.

Imhoof, 248·7 grs. [Pl. VI. 20].

Noted. Imhoof-Blumer, Monn. Grecq., p. 242, No. 73.

Hecta. Brit. Mus., 36 grs. [Pl. VI. 21].

Of base gold. There is no tunny beneath the crab.

A type, like the last, probably connected with the worship of Poseidon. Upon the stater No. 161 the claws only

of a crab are represented, together with two fish. Dr. Imhoof-Blumer believes the fish not to be a tunny, and that the fabric of the coin differs in some degree from that of the Cyzicene staters. For these reasons, and also because on the corresponding hecta the fish is absent, he thinks the coin belongs to another state than Cyzicus. He suggests that what appears to be the head of a fish held by the crab is a sun-fish. It is quite true that the fabric of this stater and of No. 161, as well as of the corresponding hectæ and twelfths, which have upon them the head or tail of a fish and other like devices, is different from that of the ordinary Cyzicenes. The fish on these archaic coins differs also from the usual representation of the tunny of Cyzicus. The monetary system is, however, the same, and the incuse of the reverse is of essentially the same form as that of the acknowledged coins of Cyzicus, while the fish may well be the tunny, though not executed with the same truth to nature. I have, therefore, included this most peculiar and puzzling class of coins (Nos. 158, 161 to 168) among the electrum series of Cyzicus, though with a little hesitation.

159. Crab. Beneath, tunny right.

Hoffmann in 1879, 14·8 grs. [Pl. VI. 22].

I have not been able to trace this coin, of which M. Six has kindly given me a cast, taken from it when in M. Hoffmann's possession.

160. Pecten shell, hinge downwards. Beneath, tunny left.

Brit. Mus., 21·1 grs. [Pl. VI. 23].

Engl. Sestini, Stat. Ant., Pl. VI. 20.

Noted. Num. Vet., R. P. K., p. 150.

161. Two fish to left, with a dot between their tails. Beneath, two crab claws.

Imhoof, 249·5 grs. [Pl. VI. 24]. Berlin, 249·8.

Engr. Rev. de la Numis. Belge, vol. v., p. 248, Pl. VII. 1.

162. Tunny to left, above head of fish, with spike projecting from it behind, to right. Beneath, tail of fish to right.

Imhoof, 41·8 grs. [Pl. VI. 25]. Lambros, 28·1 (plated).

163. Head of fish with spike, to left, behind a trifold fleur-de-lys-shaped object (a flower?). Above, tunny right.

Imhoof, 250 grs. [Pl. VI. 26].

Hecta. Brit. Mus., 41·5 grs. [Pl. VI. 27]. Leake, 41·3.

Noted. Leake, Num. Hellen. Suppl., p. 44.

The hecta has no trifold object, but only the spike, with a dot above it.

164. Head of fish, with spike, to right. Above, tunny to right, over whose tail is a trifold flower (?) upright.

Paris, 42 grs. [Pl. VI. 28].

165. Head of fish, with spike, to right. Beneath, tunny right.

Paris, 20·8 grs. [Pl. VI. 29]. W. G., 20·6.

Diff. dies.

166. Head of fish, with spike, to right. Above it tunny (?). Beneath, tunny left.

Paris, 21·6 grs. [Pl. VI. 30].

167. Head of fish, with spike, to left. Beneath, tail of fish to left.

Paris, 41·8 grs. [Pl. VI. 31].

168. Two fish-heads, each with spike, to left, one above the other. Behind them tunny upwards. In field to right two dots; and in field to left one dot.

Hirsch, 41·7 grs. [Pl. VI. 32].

Twelfth. Brit. Mus., 14·3 grs. [Pl. VI. 33].

Noted. Num. Vet., R. P. K., p. 150.

The twelfth is of very pale electrum, and has two dots, one above and the other beneath the fish-heads.

169. Pistrix to right. Beneath, tunny right.

W. G., 248·2 grs. [Pl. VI. 34].

A type probably connected with Poseidon, if it is anything more than a copy of a portion of another coin. The pistrix is found in the exergue, beneath the chariot, upon a large series of the earlier tetradrachms, &c., of Syracuse. Mr. Head has suggested, with much probability, that it was placed there to commemorate the naval victory gained by Hieron over the Etruscans near Cumæ, B.C. 474.

Upon a vase where Poseidon is represented as crushing Ephialtes with a rock, among other creatures of the sea, is a pistrix.⁴⁷

170. Prow of a ship to left, from which issues the forepart of a winged wolf. Beneath, tunny left.

Paris (De L.), 248 grs. [Pl. VI. 35]. Imhoof, 249·2.

Both the same die.

Engr. Rev. Num., N.S., vol. i., Pl. II. 6. Mon. Ined. dell' Inst. Archeol., vol. iii., Pl. XXXV. 20.

The expedition of the Argonauts plays an important part in the mythical history of Cyzicus, and the prow

⁴⁷ Lenormant and De Witte, *Élite des Mon. Céram.*, vol. i., Pl. V.

represented on the stater is probably that of the ship Argo. The ordinary type on the coinage of Cius in Bithynia is a prow, and that place is also connected with the Argonautic myth.

171. Crested Corinthian helmet to left. Beneath, tunny left.

Imhoof, 248.6 grs. [Pl. VI. 36].

Noted. Imhoof-Blumer, Monn. Grecq., p. 242. No. 72.

Though the helmet is of Corinthian, and not Athenian form, it may possibly be in connection with Pallas that it is placed on the stater.

172. Lyre. Beneath, tunny right.

Paris (De L.) (*a*), 246.1 grs. [Pl. VI. 37]. Paris, 245.8.

Imhoof (*a*), 246.2.

(*a*) same die.

Engr. Mionnet, Suppl. v., Pl. III. 1.

Noted. Brandis, p. 409.

Twelfth. Paris, 19.5 grs.

Noted. Brandis, p. 409.

A type connected with Apollo makes a fitting termination to the long and varied series of the electrum coins of Cyzicus.

W. GREENWELL.

II.

THE INSCRIPTION **ΣΟΦΥΜΕΤ** (ΤΙΣΥΡΟΙ) ON COINS OF GORTYNA.

Among Cretan coins few are more interesting than the following didrachmon of Gortyna:—

Obv.—Europa wearing chiton and peplos, seated l. in tree ;
her r. hand supports her head ; her l. rests on
tree. Around the figure is the inscription
ΣΟΦΥΜΕΤ, which is partly in the field of the
coin, and partly confined to the tree.¹

Rev.—Bull standing r. looking back.

This coin, on account of its inscription, has excited the curiosity of many Numismatists. In 1820, Sestini² first published an account of three specimens of the same coin, that is, of two in the Munich public collection and one in the Hedervar private collection ; but he gave the following very fanciful description of them :—

1, 2. Mulier moesta a. s. capiti Minotauri (!) insidens,
superne **ONYM** et in cornu dextero Minotauri
legitur **TAYPOS** (!!) id est **MYNOTAY-
POS** (!)

¹ Brit. Mus., Wroth, *Catalogue of Cretan Coins*, p. 39, No. 20, Pl. X. 4.

² *Descrizione di molte medaglie greche esistenti in piu musee*, pp. 96, 97, Tab. XIII., fig. 8 ; and, *Descrizione del museo Hederrariano*, I., p. 154. 1830.

Rev.—Taurus ad d. gradiens et retrospecticiens. *Ex m. R. Bav.* Tab. XIII., fig. 8. Duplex, quorum unus reeusus.

8. Caput tauri, vel Minotauri detracta pelle adversum, cornibus dilatatis in medio insidet Europa moesta, d. demissa, s. ad pectus composita, juxta platanus, superne **NVM** et in cornu dextero **ΟΤΑΥΡΟΣ** id est **MVNOTΑΥΡΟΣ** (!!)

Rev.—**ΓΟΡΤΥΝΙΟΝ** (retrograde). Taurus gradiens et respiciens. *Ex Mus. Hedervar.*

Some time after (1833) M. Streber³ published another description of the two specimens in the Munich collection, and showed the complete inaccuracy of Sestini's description and interpretation; but although the writer gave a good description, he could not, on account of the bad preservation of the specimens, read more than two letters, **VM**, in the inscription, and he concluded from the legend **MV** of another Cretan coin of the same period that the coin in question belonged to the Cretan town Myrina.

A few years ago (1879) the learned Director of the Berlin collection, Dr. von Sallet,⁴ published a description of a similar and very well preserved specimen in the British Museum. He read the inscription, *Τίσυροι*, and sought, with his well-known caution, to explain its significance in an article, "Die Umschrift der Europa auf Silbermünzen von Gortyna." He says, "Das Gebirge der Nordspitze von Kreta, allerdings ziemlich weit von Gortyna entfernt, heisst *Tírupos*. Nun ist zwar soviel ich weiss überall überliefert, dass Zeus im Süden der Insel gelandet und sich in der Nähe von Gortyna niedergelassen.—Aber—

³ *Numismata nonnulla Graeca ex Museo reg. Bavariae*, pp. 163—166.

⁴ *Zeitschrift für Numism.*, vi., pp. 263—265.

wäre nicht doch eine Version der Sage möglich?—Wäre es ganz unmöglich, dass eine Version der Sage den Zeus am Gebirge *Tίρυπος*, plural *Tίρυποι*, oder wie unsere Münze in leichter dialektischer Aenderung hat, *Tίρυποι*, sich mit Europa niederlassen lässt? Dass Gebirge öfter auf Münzen vorkommen ist bekannt.—Ein Beamtenname ist es gewiss nicht.”

At the same time and in the same *Zeitschrift*, Friedlaender⁵ also noticed this inscription, which he called enigmatical, and included among the explanatory inscriptions, *e.g.*, **ΤΑΛΩΝ, ΜΙΝΩΣ, ΦΕΛΧΑΝΟΣ, ΠΤΟΛΙΟΙΚΟΣ**, &c., which are very numerous upon Cretan coins. Finally, in 1883, Mr. Wroth, in his excellent paper upon Cretan coins referred to Sallet's explanation thus:⁶—“As he admits that Mount *Tίρυπος* was some distance from Gortyna, and that there is no direct mention of its being connected with Europa, his explanation cannot be regarded as altogether satisfactory. An ingenious suggestion has been made by Mr. R. Stuart Poole that the letters of this inscription are intended to represent some actual ‘graffiti’ left by worshippers who visited the sacred Gortynian plane-tree.⁷ It is well known that the Greek, no less than the Shakespearian, lovers delighted to carve on every tree the names of their Rosalinds; but against Mr. Poole's suggestion it may fairly be urged that the Greeks would hardly have ventured to cut words or names upon a sacred tree, and it might also be objected that the inscription in question is not entirely confined to the tree (as a graffito would be), but partly appears in the field of the coin. The

⁵ *Zeitschrift für Numism.*, vi. p. 233.

⁶ In *Numism. Chron.*, 1884, vol. iv. p. 35.

⁷ See also upon Mr. Poole's suggestion, Head, *Hist. Num.*, 1887, p. 395.

only Greek word of which Dr. von Sallet's reading Τίσυροι is suggestive is Τίτυρος, the Doric form of Σάτυρος, though, according to Strabo (X. 466, 468, 470) the Τίτυροι are to be distinguished among the followers of Dionysos from the Σάτυροι and Σεληνοί."

These are the several opinions concerning this interesting inscription. We believe, however, that yet another and more probable interpretation is possible, thanks to the discovery of two new specimens of the coin. In 1884, the Berlin collection acquired possession of the hitherto unedited coin:—

Obv.—Europa wearing chiton and peplos seated l. in tree ;
her r. hand supports her head ; her l. rests on
tree.

Rev.—ΣΟΡ[V]Μ[ΣΤ]. Bull recumbent l. looking back.

A second identical specimen (with ins. ΣΟΡV[MΣΤ]) is described by Mr. Wroth in his *Catalogue of Cretan Coins* in the British Museum.⁸ These two very important coins, as the inscription is upon the reverse and as it occupies exactly the same place as the legend, ΝΟΣΝVΤΡΟΛ (Γορτυνίων) upon some other specimens of the same types and period,⁹ serve to show, in the first place, that we must seek an explanation *not in connection* with Europa or the old tree, and in the second place, that *it may be another name of the inhabitants of Gortyna*. There are many examples of coins of the same town having more than one ethnical name inscribed upon them.¹⁰ We know also from Stephanus Byzantinus (Γόρτυν), that Gortyna was called variously Έλλωρίς, Λάρισσα, and Κρήμνια, and Hesy-

⁸ P. 39, No. 19, Pl. X. 3.

⁹ Gortyna, Nos. 7, 8, 21, and 25.

¹⁰ Head, *Hist. Num.*, pp. 424, 495, &c. Friedlaender, *Zeit. für Num.*, ii. 280.

chius tells us that *Καρτεμνίδες οὕτω οἱ Γορτύνιοι ἐκαλοῦντο* and *Κορύστυοι, οὕτω οἱ Γορτύνιοι ἐκαλοῦντο*. It is, therefore, I believe, very possible that the Gortynians were called also *Τίσυροι*.

It may be objected, perhaps, that Sestini says that the Hedervar specimen has upon the obverse **ΜΥΝΟΤΑΥΡΟΣ** (that is *Τίσυροι*, and upon the reverse **ΝΟΙΝΥΤΡΟΛ** *Γορτυνίων*). But what numismatist can agree with Sestini? I have examined *eight* specimens of same type of coin, and not a single one has a trace of any other inscription than **ΣΟΦΥΜΙΤ** (see also von Sallet *l.c.*). To us it is apparent that Sestini has very often, in the case of Cretan coins, read inscriptions fancifully. I am of opinion that in the case under consideration he has copied the inscription from a different specimen, described before by Pellerin, with the same inscription, **ΝΟΙΝΥΤΡΟΛ**. To this coin Sestini refers in support of his reading. But if, in spite of all these objections, the Hedervar specimen had really *Τίσυροι* upon the obverse and *Γορτυνίων* upon the reverse, that cannot, I believe, affect the soundness of my explanation that, in accordance with the inscriptions of other Cretan coins, **ΚΡΗΤΕΣ ΙΕΡΑΓΥΤΝΙΟΙ, ΚΡΗΤΕΣ ΑΞΙΟΙ, ΚΡΗΤΕΣ ΚΥΔΩΝΕΑΤΩΝ**, etc., we may reasonably read **ΓΟΡΤΥΝΙΟΙ ΤΙΣΥΡΟΙ, ΤΙΣΥΡΟΙ ΓΟΡΤΥΝΙΩΝ**. We know, moreover, that there are found other specimens in Crete on which the *ἐθνικόν* is upon both sides of the coin.¹¹

I may add that if the inscription is in the nominative, *Τίσυροι*, and not in the gen. plural, *Τισύρων*, or *Τισυρίων*, this is no objection to my explanation, because we know

¹¹ *Æ.* in Berlin with *Obv.* **ΑΓΤΑ**, *Rev.* **ΡΑΙΩΝ**!

of similar eccentricities, both out of Crete, *e.g.*, ΣΥΡΑ-
 ΚΟΣΙΟΙ ΓΕΛΩΝΟΣ, and in Crete itself Κρήτες Ιέραπύτνιοι,
 Ἀξίου, &c., of the Roman period, and ΑΥΤΤΣΘΣ
 (Αύττιοι) upon two unpublished drachms in the Berlin col-
 lection of the same period as the Gortynian coins in ques-
 tion.

J. N. SVORONOS.

III.

COINAGE OF ÆTHELBALD OF WESSEX.



ÆTHELBALD, the eldest son of Ethelwlf, succeeded his father upon the united throne of Wessex and its dependencies, late in the year 857 or early in that of 858. With respect to this date there is considerable difference amongst historians. The numismatic authors differ also. Ruding gives the date of his accession as 857. Hawkins states that he reigned from 855 to 860. Professor Freeman, who is generally very accurate in his dates, in his *History of the Norman Conquest* leads us to infer that Æthelbald succeeded to his father's throne in 858. The *Saxon chronicle* clearly states that he reigned five years expiring in 860, in which year Asser also states that he died. Florence of Worcester also gives this date as being the year in which "Æthelbald died, having licentiously governed the kingdom of Wessex for two years and a half." William of Malmesbury affirms the period of his reign to have been from 857 to 862, and Roger of

Wendover, from 857 to 861. Roger of Hoveden, in his list of the kings of Wessex, mentions Æthelbald as having reigned five years; but in his text, after referring to the death of Ethelwlf A.D. 856, states that the latter being dead and buried at Winchester, his son Æthelbald, during two years and half, after the reign of his father, governed the West Saxons and died in 860. The dates of his accession and death are given in Ethelwerd's Chronicles as 857 and 861 respectively. That Ethelwlf could not have died before 856 at all events, is proved by a grant dated A.D. 856, and set forth by Mr. Walter de Gray Birch in his very useful *Cartularium Saxonicum*, by which Ethelwlf conveys to the thegn Aldred land at Aescesybrig, or Ashbury, in Berkshire, clearly within Wessex territory. In this grant Ethelwlf designates himself as "Altithroni favente clementiâ rex Occidentalium Saxonum." To understand the effect of these varying dates, and to be able to draw anything like an accurate conclusion from them, some consideration is required of the very few historical facts in connection with Æthelbald that have been handed down to us. It appears indisputable that Ethelwlf had, at some time previously to his death, nominated his son to the kingdom of some appanage or dependent state, yielding subjection to the then great kingdom of Wessex. Ælfred, a younger son, who after the successive deaths of Æthelbald, Æthelbearht, and Æthelred, succeeded to the throne and is known to us as Alfred the Great, was the favoured son of his father, who had sent him to Rome between the years 853 and 855 for the purpose, it is stated, of securing the succession to him. The Pope, Leo IV., went through the form of anointing him with holy oil and of consecrating him as king. Thither Ethelwlf, also, shortly afterwards pro-

ceeded, and while abroad espoused Judith, the daughter of Charles the Bald, King of the Franks. During Ethelwlf's absence from the shores of this country, a revolt was organized against him in connection with the general discontent prevailing. This was headed by Æthelbald, and on the king's return civil war appeared inevitable. The disturbance was, no doubt, to a great extent caused by the jealousy experienced by Æthelbald at the consecration of his younger brother Ælfred, and which he naturally regarded as being the first step towards the latter being nominated successor to the throne of Wessex. Fortunately for all parties, an amicable arrangement was effected, and according to Sir Francis Palgrave, a valuable authority on all that appertains to Anglo-Saxon history, Ethelwlf took to himself the government of the eastern states belonging to Wessex, namely, the ancient kingdom of Kent, together with Sussex, Surrey, and perhaps Essex, whilst the kingdom of Wessex proper, which of right belonged to the head of the family, became the portion of Æthelbald, though with a nominal subjection to his father. Evidence is not wanting upon the coins of Ethelwlf of the concurrence, or perhaps sequence of events referred to, as although on some the somewhat ungrammatical inscription OCCIDENTALIVM SAXONIORVM occurs, others bear the type and character of the East Anglian A, and others again the word CANT for Kent and DORIBI for Canterbury in monogram. With regard, however, to the conflicts of dates mentioned in the beginning of this paper, it seems clear that as the general consensus of opinion on the part of the old chroniclers is to the effect that Æthelbald reigned five years, and that he reigned two years and a half after his father, one half of his reign must have

occurred during the lifetime of his father under the amicable arrangement before referred to.

On the balance of authority he must have died in 860, and I am therefore of opinion that he did not succeed his father, in the possession of the whole kingdom, until 857. It is, however, of course, possible that this might not have occurred until the early part of 858. That after the partition between the father and son, the former still styled himself "King of the West Saxons," is no matter for surprise, as titles were not so distinctive and exact as they are now, and it is even possible that some further changes took place which have not been duly recorded. In addition to this it was by no means uncommon for a king and his successor to have joint authority, and the Saxon Chronicle, at a later date puts upon record that on Ethelwlf's death, Æthelbald took upon himself the government of the West Saxons, and his brother Æthelbearht that of Kent, Essex, and other provinces. After his father's decease Æthelbald contracted an incestuous marriage with his step-mother Judith, and it is to this that the chroniclers refer when they talk of his licentious reign. Beyond this and the scandal caused by it, there is little recorded subsequently concerning him or his doings, except that having after some time put away Judith, he repented of his sin and ruled his kingdom for the remainder of his life in peace and righteousness. Having regard to the preceding outline of the history of Æthelbald, it is possible that he might have coined money, either during his father's lifetime or afterwards. The reigns of his brothers Æthelbearht and Æthelred who successively came after him, extended jointly over a period of eleven years only (excluding the term of Æthelbearht's reign in Æthelbald's lifetime), and yet

the pennies of both are fairly numerous and are of several types. There appears, therefore, to have been no sufficient reason why Æthelbald alone of the three brothers (always excluding from consideration Ælfred, whose reign was so much longer, and whose coins both in number and type were more than porportionately abundant), should have neglected to have left a record of his name and effigy upon the coinage of the time. There were not the disturbances and troubles in his reign caused by the Danish incursions to the extent, or anything like the extent, which they attained after his death, and particularly in the reign of Æthelred I., when, according to Professor Freeman, the second period of the invasions may be said to have fairly begun. In the first period of these invasions there was constant plundering on the part of these northern freebooters, and plunder, merely, seemed to be their object. In the second period their object was clearly no longer mere plunder, but settlement. Their operations would be less likely to have diverted Æthelbald from the privilege, then so highly appreciated, of coining money, than was the case with his immediate successors. Nor, of course, on the other hand, had the necessities of the realm arrived at the pitch attained in the reign of Æthelred II., appropriately called the Unready (not in its modern sense, but because he was so wanting in "raed," i.e. counsel) when possibly money was often coined for the express purpose of its being paid away in bribes to the Danish invaders. In his work on the Silver Coins of England (2nd. edit. p. 116), Mr. Hawkins refers to a penny of Æthelbald, which is engraved as No. 168 in the plates attached to that work. This coin, however, is given upon the authority of a plate drawn under the auspices of the notorious Mr.

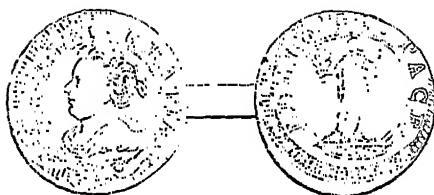
John White; but it is further stated by Ruding (3rd ed., vol. i. p. 124), that Dr. Taylor Combe saw the coin in the collection of Mr. Austin and was satisfied of its authenticity. It subsequently disappeared and has never made its reappearance. It is difficult to form an opinion based upon a mere illustration of a coin, but the judgment of Dr. Combe was generally sound, and Ruding expressly states that he was convinced that that learned antiquary could not have been mistaken as to the existence of the coin, and that it was not probable that the correctness of his eye could have been deceived by a forgery. Having regard to the fact that the piece in question appears to be of the same type as an undoubtedly genuine penny of this monarch, specimens of which are in the cabinets of both Mr. William Brice and of myself, there is further reason to believe that Mr. Austin's coin may also have been genuine. I have headed this paper with a wood engraving of my coin, which was formerly in the collection of Mr. Joseph Gibbs, and which is apparently from the same dies as Mr. Brice's specimen. The weight of my piece is almost 18 grains, but Mr. Brice's piece, purchased by him some ten years ago from the late Mr. Webster, who thoroughly believed in its genuineness, weighs as much as $19\frac{7}{16}$ grains. The moneyer's name on both coins is TORHTVLF. The type of all the three pennies referred to is that of Æthelbearht (Hks. 169, Rud. XV. 1, 2), and which occurs less commonly in the reign of his father Ethelwlf (Hks. No. 1 type, Rud. XIV. 2). In the case of the coins of this type of the three successive monarchs, Ethelwlf, Æthelbald, and Æthelbearht, as illustrated by the specimens belonging to Mr. Brice and myself, the king's profile head on the obverse scarcely varies, except that Æthelbald's head is encircled with a

diadem of pearls. The head on the piece, Hks. 168, before referred to, is very different indeed; it wants the diadem, and the work generally appears far above the quality of work of the period. If it be accurately engraved these points would to my mind form the only element of suspicion that could be adduced in opposition to its authenticity. Fortunately, however, the fact of the existence of pennies of Æthelbald now depends in no way upon this piece, although it may be mentioned in its favour that the name of the moneyer BEANMVND appearing on it, also occurs on pennies of the same type of his successor Æthelbearht. The name of the moneyer TORHTVLF, who is responsible for the pieces in the collections of Mr. W. Brice and of myself, occurs on pennies of the same type in the reigns of both Ethelwlf and Æthelbearht. It appears probable, therefore, that the same moneyer performed his functions during the three successive reigns, and hence also may arise the cause for the before-mentioned similarity of the portraits of the three monarchs upon the pieces of this type.

H. MONTAGU.

IV.

QUEEN ANNE'S SO-CALLED "BELLO ET PACE" FARTHING.



IN my work on the *Copper, Tin, and Bronze Coinage of England*,¹ I have, under the reign of Queen Anne, described (No. 16, p. 51) a very rare piece of that period, as follows:—

“*Obv.* ANNA . DEI . GRATIA. The queen's bust within a double inner circle. Under the head, a scroll. The letters of the legend on both sides are sunk, instead of being raised.

“*Rev.* BELLO ET PACE. Britannia, helmeted, and standing, holds an olive-branch in her right hand and a spear in her left, in a double inner circle. In exergue, 1713. A broad grained rim. R. 7.”

I further stated that the piece was incorrectly engraved in Ruding, Suppl. Part II. Plate IV. No. 1, and that examples occurred in the Hunter Collection and in the British Museum; the latter in poor condition. I also

¹ Rollin and Feuardent. London, 1885.

referred to one comprised in the Bergne Sale (Lot 1076), and which was described as being in pewter or mixed metal.

The piece described, whether it be coin or medalet, is of most inferior design and execution; and in consequence of some excitement in the numismatic world, caused by the fact that the specimen formerly belonging to Mr. Bergne was sold at the sale of some portion of the coins of Mr. E. Shorthouse, at Birmingham, on the 2nd December, 1886, for the large sum of £19 17s. 6d., I have been induced seriously to consider whether it is really a farthing or only a jetton or medalet of the period. In the result, I have come to the conclusion that it is nothing more nor less than a badly-designed and as badly-struck medalet privately issued in celebration of the peace of Utrecht.

I have carefully examined the specimen in the National Collection, an engraving of which is given above, as well as another specimen which came into the possession of Mr. C. E. Mackerell under the circumstances hereafter mentioned. Both these are struck in a better kind of copper than the Bergne and Shorthouse piece, which by the courtesy of its purchaser and present proprietor, Mr. Murdoch, I have also carefully scrutinised. All the specimens appear to be more in the nature of cast than of struck pieces, and would at first sight seem to have been cast from a chased model. On the whole, however, I am of opinion that they were struck from dies carelessly engraved, and probably also in a somewhat worn condition.

It is with great diffidence and with some hesitation, having regard to the kindness displayed on all sides, that I have decided upon putting forward my views concerning the attribution of these pieces, but *magna est veritas*

et praevalabit, and their owners have proved themselves true numismatists by not in any way discountenancing a free discussion on a subject in which they are so greatly interested.

Mr. Murdoch's piece is, notwithstanding the description in Bergne's Sale Catalogue, not of pewter or mixed metal, but certainly of copper, though apparently of a somewhat inferior quality. It formed Lot 829 in the Shorthouse sale, and among the remarks appended to its description was a statement to the effect that only three specimens were known. This is not accurate, as in addition to those mentioned in my book, the late Mr. Webster had two, one of which he sold to Mr. Mackerell, in whose possession, as before stated, it now is, and the other went elsewhere. It is possible that others may exist, as Mr. Webster obtained his two specimens quite casually, and the piece is one that would scarcely inspire the uninitiated with any presentiment of its rarity, having regard to its worthless execution and "cast" appearance.

Notwithstanding the inaccuracy in other respects of the engraving in Ruding, that author correctly inserted the date, 1713. It is, however, somewhat natural that the final 3, which is most wretchedly formed, should have been mistaken by others for 5, as a magnifying glass is almost necessary to prove its identity. The error referred to was made by no less an authority than the late Mr. William Till in his *Description of the Farthings and Pattern Halfpennies of Queen Anne*,² issued as an appendix to his *Essay on the Roman Denarius*, he having previously described the piece with the same erroneous date in *The Mirror* of the 30th May, 1835, published by Limbird at 134, Strand.

² Longman, Orme, Brown & Co. London, 1838.

It is due, however, to Mr. Till to state, that he concludes his description as follows: "These last described farthings, if farthings they really are, are of extreme rarity; indeed they differ so much from the others in their execution as to induce me to doubt their emanating from the Royal Mint. The work on them appears very inferior to that of Croker. They might have been executed by Samuel Butt or Gabriel Clerk, two other mint engravers at this period."

I know nothing of the work of Gabriel Clerk, but the surviving handiwork of Samuel Bull, who, I presume, is the artist referred to as Samuel Butt, is very superior in every respect to the work displayed by the engraver of the jetton in question.

The Rev. Henry Christmas, in his work on the *Copper and Billon Coinage of the British Empire* of which but very few copies are extant, owing to the circumstances explained in my own treatise upon the same subject, not only repeats the error as to the date, but also adds to his description of the piece, "This last is said to exist in white metal, and is remarkable for the date 1715, being the year after the Queen's death." He also observes that it is probably not the work of Croker. As to this there can of course be no doubt, and the importance of the author's observation as to the remarkable nature of the date fails with the correction of the error into which he and Mr. Till appear to have so strangely fallen.

Mr. S. Martin-Leake, in his *Historical Account of English Money* (2nd edition, 1745), refers to farthings of Queen Anne, but does not mention any coin of that denomination at all similar to the piece in discussion. This is valuable evidence, though of a negative character only, inasmuch as he must have studied the subject

at a period not very distant from the date of the piece.

Thomas Snelling, also, who wrote in 1763, was no mean authority, and in matters of detail offers us the most perfect and accurate information on the subject of English coins and patterns that we possessed prior to Ruding's *magnum opus*. He depicts in a somewhat poorly executed plate, and describes in his text, four different kinds of farthings, or patterns for farthings, of Queen Anne, but he also does not in any way refer to this piece. It is scarcely credible, having regard to his extensive knowledge of English coins, and his no less extensive dealings in them, that he should have failed to record its existence, had he thought that it could possibly have been a farthing or pattern for a farthing.

The only other writer whom we may consult with advantage is the celebrated Dean Swift, who in 1712 delivered to the Lord Treasurer his plan for improving the British Coinage. He proposed—

(i.) That the English farthings and halfpence be re-coined upon the union of the two nations.

(ii.) That they bear devices and inscriptions alluding to all the most remarkable parts of her Majesty's reign.

(iii.) That there be a society for finding out of proper subjects, inscriptions, and devices ; and

(iv.) That no subject, inscription, or device be stamped without the approbation of the Privy Council (*Guardian*, No. 96).

In a letter to Mrs. Dingley dated January 4, ¹⁷¹²/₁₇₁₃, he says, "The Lord Treasurer has at last fallen in with my project (as he calls it) of coining halfpence and farthings with devices, like medals, in honour of the Queen, every

year changing the device. I wish it may be done." (*Letters by Dean Swift, &c.*, vol. i. p. 297; see also Ruding's *Annals*, 3rd ed. vol. ii. p. 65, where, however, the BELLO ET PACE piece is referred to as a farthing.)

There were reasons why Dean Swift's proposals were favourably received by Robert Harley, Earl of Oxford, who was then the Lord Treasurer. The Dean had never been shaken in his fidelity to him, both in prosperity and adversity, and was especially entitled to some gratitude for his strong advocacy of the Earl's cause during the political crisis of 1711. In that year he had penned in support of his patron, the famous prayer, "Pray God preserve his health; everything depends upon it," &c., which, however, did not protect the Lord Treasurer from a dangerous and almost fatal wound, which was within a few days afterwards inflicted upon him by the ex-abbé de la Bourlie, better known as the Marquis de Guiscard, while the latter was being examined before the Privy Council on a charge of treachery to the nation which had given him shelter.

I do not think that there is any other unofficial authority which throws any light on the subject, but I thought it well, before arriving at any definite conclusion, to examine thoroughly the Mint Records of the period, to which, by the courtesy of the Hon. C. W. Fremantle, the Deputy Master, I have had unrestricted access. On this head, I may remark that no regular Records were at that time kept, and very disjointed entries only occur in the Mint books. These entries appear to have been made in a very perfunctory manner, apparently only as and when it occurred to some subordinate officer to make them; and even then in many cases the documents entered appear to

be in the nature of mere *précis*, and not to be exact copies of the originals. In contrast to this state of things, future generations of zealous numismatists will, I hope, combine with those of the present day, in their appreciation of the carefully prepared and exhaustive Mint Reports that are now annually presented to us.

In the Mint Records of Queen Anne there is absolutely nothing recorded concerning the farthings actually coined in her time, but a great deal concerning those which were not. There is no mention whatever of John Croker, the talented engraver, in connection with his execution of the dies for the halfpennies and farthings of the Queen.

Croker's name was originally Johann Crocker; he was born at Dresden on the 21st of October, 1670, and came to England in 1691. In 1697 he was appointed Assistant Engraver to the Mint, and in 1705, Chief Engraver. There is no doubt but that his mind had been greatly influenced by the before-mentioned suggestions on the part of Dean Swift, and he clearly agreed with the views of those who thought that the time had come when the principle adopted in the old Roman mint should be revived, and that every coin should exhibit some fact in the history of the time. The complaint of the Dean and of those who favoured his views was directed then, as ours is now even in these enlightened times, against mere heraldic reverses and the general pooriness of the monetary devices in use.

It was to these influences that we owe the pattern halfpennies and farthings of Queen Anne. Most, however, if not all of the specimens of these now existing in our cabinets, were not struck off till 1740 or thereabouts, by Mr. Bush, of the Ordnance Office in the Tower, into whose hands the dies had passed and who retained them until the Hon. Richard Arundell, who held the office of Master

of the Mint from 1733 to 1740, ordered them to be destroyed.

There is no mention in any of the Mint Records either of the engraving or of the destruction of these dies. There is, however, a valuable entry, under date of the 5th December, 1712, in the shape of a letter addressed to the Mint authorities from the Treasury Chambers, which runs as follows:—

“TREASURY CHAMBERS, 5th December, 1712.

“GENT^N,—My Lord Treasurer is pleased to direct you to make forth and transmitt to his Lship an Extract of the sev^l proposals that have been preferred to you since her Ma^{ys} Accession to the Crowne for making halfpence and farthings and of the reports that have been made by you thereupon.

“I am, Gentⁿ,

“Your most humble Serv^t,

“F. HARLEY.”

Robert Harley, Earl of Oxford, was, as before stated, the Lord Treasurer at that time, and in reply to the letter above set forth an elaborate minute was prepared and put into the form of a report, a*copy of which I have found more convenient to append to this paper.

Upon a careful perusal of this report, and from what has been already stated with regard to the improvements proposed, and to some extent executed, in respect of the coinage generally, it will be seen that great importance was attached on all sides to an amelioration of the then existing state of things. The feeling of the country and of those entrusted with the administration of the currency (or as Professor Leone Levi would have us call it, the circulation) question, was clearly in favour of an improved

system, accompanied by more artistic designs, and what is not unimportant to the present discussion, an improved quality of the metal employed. These were not only the views of the Lord Treasurer, but also of many of his contemporaries, including more especially the celebrated Sir Isaac Newton, who was then Master of the Mint.

With reference to the subject of the quality of the metal, there is a minute in the books of a communication made to the Treasury on the 22nd January, ¹⁷¹³₁₇₁₄, a copy of some portion of which is worth recording.

"To the most Hon^{ble} Robert, Earle of Oxforde, &c.

"In obedience to y^r Ldshps verbal order of reference concerning the best manner of Importing copper into the Mint to be coined into Copper Money of a certain Standard, and whether such Importation may be made free, we humbly represent to your Lordships that if copper be mixed with any other base mettall or semi-mettall it will not endure the hammer when red-hott, butt will fly in pieces. So soon as it is refined by the copper workers to that degree as to be pretty well purged from all other base mettalls it begins to endure the Hammer when red-hott without flying in pieces, but nott without cracking. And for making Vessells and other Utensills of Copper there is no need to refine it higher, &c., &c.

"The weight of all the copper received and the weight and tale of all the copper money coined may be entered into Books and in the accounts of the Master and Worker, and the surplus above all charges may be paid into the Exchequer."

The above is valuable as evidencing the opinion of so philosophic a worker as Sir Isaac Newton, and is not of

less use in conjunction with the terms of the report appended hereto as proving the improbability of the issue, at all events by authority, of a piece of so worthless a design, and more especially of such base metal as that on the subject of which this paper is written.

The coinage of the Queen had, in every respect and in every metal, been brought to such a pitch as well to merit the eulogy indulged in by Ruding (3rd ed., vol. ii. p. 61), who after a reference to the debasement during the reigns of James II. and William III., refers to the subject in the following terms: "Thus the art of coinage languished until this glorious reign restored to a high degree of vigour those powers which neglect had so greatly debilitated."

In any event, also, if the piece really represented a current farthing, a great number of them should have naturally survived to our times; firstly, because the date is not a very distant one, and secondly, because the mere stamping upon a current coin of an historical design would have certainly insured its preservation as an object of curiosity.

It may be urged that, admitting it was not a current or authorised pattern, it may have represented a private pattern submitted on behalf of some one among those who were anxious to secure a Government patent for the coining of farthings, and of whom there were several, as appears by the before-mentioned report. In reply to any such argument I can only say that any such aspirants, also, would have been only too anxious to issue a pattern which would be superior and not inferior in execution to the inartistic copper pieces of the preceding reigns, and they would have endeavoured in point of design and execution, if not to equal, at all events not to fall so far below the

patterns then or so shortly afterwards struck by Croker. To have submitted such a wretched production as that which is figured above, could only have had the effect of inviting its instant rejection.

The only remaining point to be considered under this head is that of the weight. The ordinary current farthing of Queen Anne, dated 1714, weighs when in the finest condition about 81 grains, but this is as a "dump." The thinner and more spread pieces, probably struck as patterns, of the same type, weigh 71 grains or thereabouts, and in the case of one of my specimens, only 67 grains. Mr. Mackerell's specimen of the BELLO ET PACE piece weighs 66 grains, and that belonging to the National Collection, 7 or 8 grains more, though the latter appears to be in an inferior state of preservation. With respect, therefore, to the question of weight, nothing definite can be predicated, except that so far as it goes, it is rather in favour of than against the authenticity of the piece as a farthing. I attach, however, little importance to this, as any coincidence in point of weight is necessarily due to the similar coincidence in point of size, but for which the question involved would never have necessitated a discussion.

On the negative evidence, therefore, so far as the circulation question is concerned, I venture to assume that almost everything is against, and that there is absolutely little in favour of our perpetuating the idea that the piece is either a farthing or a pattern for a farthing.

I will now deal affirmatively with the more probable theory that it is a medalet or jetton only.

As to this, there could never have been any doubt, but for the fact that the piece is of about the size and weight of a farthing, and that the obverse bears the simple in-

scription of ANNA DEI GRATIA, which occurs in that form on all the farthings or patterns for farthings of Queen Anne, except in one instance where the equally simple form ANNA REGINA takes its place. The reverse is clearly of a medalllic character, as I shall hereafter show. Sunk letters were unknown on the current coins of the realm, and were not adopted until the reign of George III., and then only very temporarily on the copper coinage of 1797.

My theory is that the rarity of the piece was caused entirely by its common and worthless character, which had the effect of its not being thought worthy of preservation and of being handed down to posterity, as was the case with more artistic medals.

In the course of study of our medalllic series, assisted by that valuable addition to our book-shelves, *The Medalllic Illustrations of British History*,³ we frequently find that certain medals of artistic value, and particularly coronation medals of our sovereigns, are not uncommon, but that the badly-executed medalets or jettons, evidently cheap copies of these and contemporaneously issued for sale in the streets, are more or less rare. This is entirely due to their not having been considered worth preserving at the time. In many cases they are of very much greater rarity than their prototypes, and as a general rule they are absolutely not procurable in a high state of preservation.

There is an instance of this clearly in point of the reign of Queen Anne which tends to prove my case. The coronation medal of that august sovereign, with the reverse

³ Printed by order of the Trustees of the British Museum. London: 1885.

legend VICEM GERIT ILLA TONANTIS, is a very well-known piece, and on the original issue the Queen's name appears with all her titles, ANNA : D : G : MAG : BR : FR : ET · HIB : REGINA. At the same time, however, very common and worthless imitations were issued under the circumstances above alluded to, and all these bore the inscription of ANNA DEI GRATIA or ANNA · D · GRA only (*Med. Ill.*, vol. ii., pp. 229—230, Nos. 6, 7, 8, and 9), and they are all much rarer than the authorised coronation medals. Again, those counters equally poor in execution, which seem to convey a somewhat coarse satire upon the negotiations for peace in 1714, and upon which the Queen was depicted in the act of inviting the approach of Louis XIV. (*Med. Ill.*, vol. ii., pp. 415—416, Nos. 285—288), bear the Queen's title shortly in a similar manner, and they are all very rare. It may be fairly assumed that the saving of words on the die was of some importance in connection with the question of expense, as, doubtless, this class of medalet was necessarily issued at the very lowest possible price, so that he who ran might buy.

Similar cheap counters of the reign of George I. also bore the King's title in a short form (*Med. Ill.* vol. ii. p. 428, No. 17 ; p. 429, Nos. 21 and 22 ; p. 483, No. 14).

With regard to the reverse of the piece in discussion, I may in the first place observe that, in my opinion, the visage of the Queen was intended to be depicted both on the figure of Pallas on the coronation medals and also upon the figure of Britannia on the pieces hereinafter referred to as commemorating the peace of Utrecht. In the same manner and for the same reasons, I think that the figure on the reverse of this piece may probably also have been intended to bear the Queen's likeness.

There is no resemblance, in the case of any of these, to

the typical form borrowed in the time of Charles II. from the features of the beautiful Frances Stewart, afterwards Duchess of Richmond. As to the latter, I may take this opportunity of stating that I unreservedly accept the correction of my critics, to the effect that the features of Britannia on the reverse of Charles II.'s copper coins were so derived, and retract the statement to the contrary, contained in my work on the copper coinage.

But with regard to the coins of Queen Anne, the fine lineaments of the countenance disappear, and it seems clear to my mind that Britannia on her pieces is always represented with a close copy of her more stolid face. Nothing is more probable than that a delicate compliment to the Queen was thereby intended, as was not unusual in those times. There appears to be circumstantial proof as to this in the fact that on the farthings of the Queen, bearing the date 1714, which were in actual circulation in her time, the figure of Britannia, bearing, as I contend, her likeness, has the right leg covered and the bosom also is fairly clothed. In the case, however, of Croker's various patterns for halfpennies and farthings, and which were not adopted in her reign, the right leg is bare and the bosom is very uncovered. The Queen's well-known delicacy evidently induced her not to approve these patterns, and they were set aside in accordance with her wishes. This suggestion is not free from corroboration, as it is an ascertained fact that the same objection arose in connection with the rare pattern guinea of 1702, also by Croker, with the monogram *R* in the centre of the reverse, which the Queen rejected in like manner, owing to her bust being so uncovered as to shock her modesty.

In addition to this, her bust on her current gold

coinage, unlike that of her immediate predecessors or successors, is not bare, but is modestly draped to satisfy her sensitive ideas.

On this subject, it may be lastly observed that the figure of Britannia bears the Queen's lineaments upon its face throughout the copper coinage of George I., also the work of Croker, but that at the beginning of the reign of George II., finer features and a younger face were introduced, and have continued with more or less variation to the present day.

I have in making these observations departed, I am afraid, somewhat from the immediate scope of this article, but returning now to the question of the design of the reverse of the piece in discussion, it will be seen that, in point of general device, it resembles to some extent that of the reverse of the very well-known medal struck in 1713, in celebration of the peace of Utrecht. This medal is described in the *Medallic Illustrations* (vol. ii. p. 400, No. 257) as follows:—"Britannia stands, l., with spear and shield, and holds out an olive branch; on one side are ships, on the other, men ploughing and sowing. Leg. COMPOSITIS . VENERANTUR . ARMIS. Ex. MDCCXIII." This was struck by authority and distributed at the public expense to members of both Houses of Parliament and to other persons.

The next two medals described in the *Illustrations*, specimens of which are in the National Collection, and both of which are extremely rare, prove my case much more thoroughly. The size of the first of these (vol. i. p. 401, No. 258) and the design of its obverse, are identical with those of the preceding piece, but the reverse is thus described:—"Rev. Britannia, helmeted, standing front face, holds an olive branch and a spear; on one side

are ships, on the other, men ploughing and sowing. Leg. BELLO ET PACE (In war and peace). Ex. ANNO MDCCXIII. PAX RESTITUTA (Peace is restored in the year 1713).” The second of these two medals has a similar obverse and reverse, and only varies in its size, being 1·9 as against 1·35.

Here we have, therefore, the very device and the very inscription of our own piece; and what is more natural than that a third variety of still smaller size should have been struck, particularly having regard to the tendency of the times before referred to in connection with the issue of cheap and inferior copies of interesting medals for sale in the streets?

As against this it may, of course, be urged that the pattern farthing of Queen Anne, by Croker, bearing the equally medalllic device of Peace in a biga, with an olive branch and sceptre, and which bears the legend PAX MISSA PER ORBEM and the date 1713, should upon the same argument stand or fall with the more debateable piece of which I am now treating. I see no doubt, however, as to the authenticity of that pattern. It has in its favour size, shape, and workmanship, and it was indisputably struck in several metals from Croker’s dies, in the reign of George II., under the circumstances before referred to, and this alone affords conclusive proof on the subject. Notwithstanding this, it is yet included as a jetton, in the collection of the late M. M. L. de Coster, and it is so described in the *Description du Cabinet de Jettons Historiques d’or et d’argent*, bearing his name.⁴ It is, however, more accurately called a farthing by the Count Maurin Nahuys in his article on that collection, in

⁴ Bruxelles, chez Fr. J. Olivier, 1883.

the *Revue Belge de Numismatique*, and he expatiates on its rarity in silver, on the ground that the natural metal was copper, little knowing that as a matter of fact the impressions in copper are rarer than those in silver.

The device of the piece which is in discussion was not wholly confined to the English medallists, as there is a very similar jetton of Louis XIV., also struck in commemoration of the peace of Utrecht. This bears the head of the King to the right, and the inscription LVDOVICVS MAGNVS REX; on the reverse stands Pallas with the olive-branch, in her right hand a spear, to which are attached two mural crowns; in the exergue EXTRAORDINAIRE DES GUERRES, 1714.

On the whole, therefore, it appears to me to be certain, that our piece, heretofore considered to be our rarest Queen Anne's farthing, must yield its place under that head, and must be relegated to the more ordinary class of medalets or jettons. Its rarity as a medalet or jetton cannot be disputed, but it owes that rarity to the fact that it was not considered to be a piece worthy of preservation.

I must apologise if, in endeavouring to prove my case, I have been somewhat discursive and have introduced, perhaps, more material than was absolutely necessary. I, however, think that if a fallacy exists, it is better to try to kill it outright than simply to scotch it and leave to it any vitality by which it might survive, again to trouble some future generation of numismatists.

H. MONTAGU.

APPENDIX.

REPORT.—Abel Slaney, Citizen and Woollen Draper of London, as principal undertaker for the coining halfpence and farthings in the reign of the late King and Queen, alledging that he was a very great sufferer in the changing of Tin halfpence and farthings for copper by tale, proposed, in the year 1703, to coin 700 Tun of Copper halfpence and farthings in seven yrs. of eq^l value, weight, and fineness of the last halfpence and farthings, to be melted, rolled, cut, and stamped att her Ma^y's Mint in the Tower, subject to a comptroller to be appointed by Her Majesty and at the undertaker's expence.

In consideration of such grant, the said Slaney for himself and partners proposed to give Her Majesty a fine of £5,000 and a rent of £1,000 p. ann. by half-yearly payments, and to be under such restrictions and regulations as Her Ma^{ty} should think reasonable. Thomas Renda, Esq^{re}, Edward Ambrose, and Dan^l Barton, who were before Partners with the said Slaney in coining the former halfpence and farthings, understanding that the said Slaney designed to intitle a new sett of partners to the merit of another patent upon the termes by him proposed, did peticon that if Her Ma^{ty} thought fitt to grant a new pattent for making copper halfpence and farthings, strangers might nott reap the benefitt of the expences they had been att in performing the former pattent which they pretended was done to their loss, butt that they might have such new pattent, paying for the same what was proposed by the others.

Will. Shepherd, N. Shepard, and George Freeman, did in March ¹⁷⁰⁴₁₇₀₅ peticon to have a patent to Impower them to coine forty or fifty Tunns every year for eight or ten years, obliging themselves to make them of English Copper of equal weight (and) fineness with those now currant.

The fellow Moneyers being poor and needy and having no worke in the Mint did about the same time peticon to the same effect, that out of the profit of such coinage they might sustain themselves until the Mint was sett to work about gold and silver moneys.

Soon after the Union, S^r Talbot Clerk and partners did represent that having, in the year 1686 obtained Letters patents for 14 years to putt in practice a new Invention of Furnaces for

melting and refining Metals out of Oars, and that by their care and expence great advantage had accrued to the Nation, but that by reason of great difficultys they mett with in the management, and the time having expired, they had nott made the hoped for advantage, they therefore did petition that in some recompence for their charges and expences they might send in two Tunns of Copper Blanks per week into the Mint until they had disposed of Seven hundred Tunns.

Mr. Chambers, hearing of this proposal of Sr Talbot Clerk, represented that He and divers other persons had purchased, at a very dear rate, of the said Sr Talbot Clerk and others concerned with him, their Interest in the said Pattent and were afterwards incorporated by K. W. and Q. M. under the name of the Governor and Comp^y of Copper Mines in England. And that having very much improved the Copper Works, and at the charge of above £20,000 having obtained the knowledge of the making copper fine, and having a greater stock in his hands than could be disposed off, did propose to send 100 Tuns of Copper into the Mint at the rate of 12^d. p. pound to be there coined into halfpence and Farthings at such value as should be directed so that the charge of coining the same and other incidents might be born out, and that He might have 12^d. p. pound to be paid to Him as fast as the Copper Money should be disposed off.

William Morgan, Gent., and others did, in the year 1708, petition for the grant for the coining 1,000 Tuns of English Copper, one half into halfpence and the other half into farthings and half-farthings, within the Terme of Seven years, to be of weight and Fineness according to a standard to be agreed to, which standard was to be at least 20 per cent. finer and better Copper than the 700 Tuns formerly coined. And was to be melted, assayed, rolled, cutt, and stamped at the Mint in the Tower, subject to a comptroller to be appointed by her Majesty and at the expence of the undertaker.

By this proposal all the copper halfpence and farthings formerly coined were to be taken in and exchanged by the proposer in Tule for those of the new stamp and so melted down.

Mr. William Palmes, in the year 1710, did petition that towards a Recompence for Losses he had sustained, he might have a pattent for the coining 700 tuns of Copper in fourteen years, subject to such agreement, limitations and covenants as were made in the pattent granted for the coining the former 700 Tuns.

The several reports that have been made upon those respective petitions and proposals have all been to the same effect, humbly

setting forth that all the coinages of halfpence and farthings since the year 1672 viz^t in the reign of King Charles the 2^d, King James the 2^d and in the beginning of their late Majestys, King William and Queen Mary, were performed by Comm^{rs} who had money imprested from the Exchequer to buy Copper and Tin, and coined at most at 20^d. per pound Avoir-depoise, and accounted upon oath to the government for the charge and produce thereof by Tale.

That upon calling in the Tin farthings and halfpence by reason of the complaints made against them, a pattent was granted to S^r Joseph Herne and others who contracted to Change the same, and to enable them to bear that Charge they were allowed to coine 700 Tunns at 21^d. p. pound weight with a remedy of a halfpenny without being accountable to the Government for the Tales, the reason of which allowance ceasing, wee have all along been humbly of opinion that the said pattent was nott to be drawn into president, especially since the money made thereby was light, of bad copper and ill-coined.

We have further humbly reported that it is best to coin the copper money as near as conveniently to the intrinsic value, including the charges of coinage, sett allowances, and incidents, and reckoning the copper att what it would sell for if the new money should be melted down again, for which reason itt ought to be free from such mixtures as diminish the markett price, and that whatever profit arises by the coinage Her Majesty may have it in Her power to gratifye whom she please therewith. And therefore the former method by Commission and upon acc^t seemed the more safe; commendable, and advantageous to the Government, especially if the method used in the coinage of gold and silver be observed as near as can be conveniently in the coinage of copper. For thereby the Coinage may come nearer to the Intrinsic value and will be better performed and of better copper, and by a standing commission any Quantity may be coined at any time as the uses of the Nation shall from time to time require for preventing Complaints. For in the times of the peticons and proposals above menconed, there was at first no want and afterwards no considerable want of copper money, and it was thought safest to coin only what was wanted least the coinage of too great a Quantity at once should occasion complaints, as it did actually in parliam^t in the coinage of the first Six hundred Tuns of the present copper money.

And further upon the peticon of Mr. Morgan there was a verbal report to, that to call in all the copper money then currant would be a loss of 70 or 80 Thousand pounds to the Governm^t or above, and that a Thousand Tunns were too

much, six or seven hundred Tunns being found sufficient to stock the Nation of England. And to an argum^t of the pet^{rs} that a new coinage of weightier and better money would cause the old money to be rejected by the people and lose its currancy, it was answered that a great coinage, suppose of 600 or 700 Tuns, might have that effect because alone sufficient for the uses of the Nation, but a small coinage *nott* sufficient for that purpose was best.

This is the tenour and substance of the Reports which have been made upon the petico^{ns} and proposals referred to this Office during Her Majesty's reigne. All which is most humbly submitted to Y^r Lo^{rs} Great Wisdom.

Mint Office, the	December, 1712.	{	Craven Peyton.
			Is. Newton.
			Edw ^d . Philipps

(Copies of Slaney and Shepherd's reports follow.)

V.

PAPAL MEDALS OF THE FIFTEENTH CENTURY.

INNOCENT VIII. (Giovanni Cybo) 1484—92.

IN Rome scenes of riot followed the death of Sixtus IV., and Roman turbulence, headed by the Colonna, held its saturnalia. For many days the Sacred College was afraid to meet in conclave to elect another Pope; and when it did meet, it met to find itself speedily the subject of a surprise. During the night of August 28th, two of its members, men versed in intrigue, went from cell to cell of the younger cardinals, and so made terms with them that when morning broke, those who slept were awakened with "Come, we have made the Pope." On their enquiring "Whom?" "The Cardinal of Melfi," was the answer. "How?" "Why, during the night while you were sleeping, we collected the votes, save of you sleepers." Then, they perceiving that those who had played this trick were eighteen or nineteen, and that they were too few themselves to undo what had been done, consented, and Cardinal Cybo was accordingly proclaimed. Such is the narrative of the chronicler.

Giovanni Battista Cybo was a Genoese by birth, but a Greek by extraction. His father was a soldier of some distinction in the wars with Naples, but the son early betook himself to Rome as a churchman, and was there

befriended by a brother of Nicholas V. In 1473 he became Cardinal, and now was chosen Pope in the manner described, assuming the dignity under the name Innocent VIII. His coronation took place September 12th, 1484, in St. Peter's. The letter which our English king, Richard III., wrote to him on the occasion, congratulating him on his elevation to the Apostolic See, and "rejoicing that the Church of God had been provided with so worthy a pastor," has been preserved. It is signed with Richard's name, and was "written from his castle at Nottingham." A king's courtly phrases and nothing more. Innocent's reign lasted nearly eight years, and it had little in it which can interest us of to-day; while, as regards the interests of the great Western Church, it left no more mark on them than his shadow left on the walls of the Vatican. To this it is fair to add that in his later years the Pope suffered from a constitutional lethargy which would cause him to drop asleep even while transacting business. His continued feuds with the King of Naples—feuds which he is accused of having fomented from interested motives—followed with ill-grace that prompt appeal which he made to Europe to combine together against the Moslem. Subsequently, his reception at Rome of Zizim, son of Mahomet II., and brother of the reigning Sultan, forms, doubtless, the most conspicuous event in his reign. At Prusias, in Bithynia, the brothers had met in arms, disputing for the throne. Zizim being worsted, rather than submit to Bajazet's fraternal embraces fled for shelter to Rhodes; he preferred to trust himself to the Knights Hospitallers of St. John. Their Grand Master, Peter d'Aubusson, however, delivered him to the King of France, who in turn delivered him to the Pope.

Innocent received the fugitive prince honourably

enough,¹ indeed, at one time it seemed as though Zizim was the destined commander of the Crusade, which the Pope was beseeching the Powers of Christendom to take part in; but eventually it answered his purpose better to treat Zizim as a prisoner at large, and allow the Sultan to transmit yearly to the papal treasury the sum of 40,000 crowns of gold for his brother's maintenance. The Pope's ardour as to the Crusade was in part professional, for in truth he was by nature peaceful,² but the sincerity of Bajazet thus to make provision for his rival's residence in some other city of the world than Constantinople may not be doubted.

Calendared among the State Papers we have a letter to Innocent from another king of England, which, connecting this Pope with English affairs of that day, strikes the note of a tune which has been heard since then. It is a letter written in 1487 by Henry VII., in which he names certain Irish prelates for lending their assistance to the rebels, and to *a certain spurious lad* "whom victory hath now delivered into our hands, they pretending that the lad is the son of the late Duke of Clarence, and crowning him as king of England." "I implore your Holiness," adds the King, "to cite them, as having incurred the censures of the Church." The letter, signed with the royal autograph, was written "from our palace, near the Castle of Kenilworth."

Innocent died at Rome in 1492. His body lies buried in St. Peter's, in the Capella del Coro, the chapel well

¹ "Vixit Zizimus toto deinceps Innocentii pontificatu Romæ in Vaticano honestâ custodiâ."—Onuphrius, de Vita Innocentii VIII.

² His epitaph, when re-written in 1621, described him as "Italiæ Pacis Perpetuus Custos."

known to modern visitors as that in which the daily services are held. Beneath its arcade there stands, over his tomb, the graceful monument in bronze which Vasari mentions as the work of Antonio Pollaiuolo. It represents the pontiff seated, in the act of blessing.

The medals of this Pope are few in number.

1. *Obv.*—INNOCENTII . IANVENSIS . VIII . PONT . MAX . MCCCCLXXXIV. Bust of pope to left, head bare, showing tonsure, pluviale over his shoulders brought together by "rationale" on the breast.

Rev.—IVSTITIA . PAX . COPIA. Three female figures draped. Justice to the left holds a sword over her shoulder and a balance in her left hand; Peace stands, holding a cornucopiæ, and in her left hand a palm-branch; Plenty, to the right, with a cornucopiæ over left shoulder, and in the right hand heads of corn.

Armand, vol. i. p. 60, 4, 5; Bonanni, vol. i. p. 107, 4; Venuti, p. 39.

Sizes 85 and 55 millimètres.

This medal, though unsigned, has been generally attributed to an artist whose praises are found largely in the pages of Vasari, and whom Venuti describes as "artifex certe optimus," the above-named Antonio Pollaiuolo. Vasari tells us it was this Pope who brought him to Rome.

The portrait which Antonio has given us on the medal represents the Pope as handsome, but not without some coarseness of expression; and his contemporary Onofrio has confirmed this impression with the words, "corpore procero, candido et decoro," which he uses as his own description. The treatment by which the medallist has

rendered the figures of Justice, Peace, and Plenty, on the reverse, is altogether classical; the figures themselves must be taken to stand for that material prosperity which it was the desire of Innocent that Rome should enjoy, although, by his meddling in the affairs of Naples, he one day brought to the city's gates the Duke of Calabria with an army (1486).

While minding his own business at home he was, however, certainly successful in promoting peace, for he cleared the States of the Church of robbers, and the streets of the city of footpads. There is another medal of this same type, but smaller in module, and the date is omitted. Neither one sort nor the other is common.

It is related in Bonanni, that when the tomb of Innocent was opened, September 5th, 1606, and his remains were removed to the new basilica, they were found enveloped in tissue of gold, and lying near the feet was one of these medals.

2. *Obv.*—INNOCENTIVS . VIII . PONT . MAX. Bust of pope to right, tiara, collar of pluviale plain.

Rev.—ANNO . DOMINI . M . CD . LXXXIV. Arms of the Cybo family. Shield divided by horizontal line, or per fesse. Above, or, a cross, gules; below, gules, a bend chequy, azure and argent, surmounted by keys and tiara; above and below the shield and on either side of tiara is a small asterisk.

Trésor de N. (Papes), Plate III. 4; Bonanni, vol. i. p. 107, ii.; Armand, vol. i. p. 297, 20.

Size 13, Mionnet's scale.

I have said the family of Cybo (or Cibo) was originally Greek, but for a long time they had been settled in Italy, and from the Neapolitan branch had sprung Boniface IX., pope in 1381.

The bend (checky, azure and argent) points to the name root, κύβος, a cube, and in the plural, dice; for the bend is composed of little cubes or squares, blue and white alternately. The arms of the city of Genoa (or, a cross, gules) which appear in the upper part of the shield, formed an honourable augmentation, which, in the thirteenth century the Cybo family received, when William Cybo returned from an embassy to France with such results that this became the grateful Republic's recognition of his merit—"præclarum summæ laudis testimonium," saith Onofrio. In Venuti, his numbers 1, 2, 3, 4, have the arms of the Cybos, surmounted by the cross keys and tiara. The first three, he says, are cast medals. Such I have never seen. No. 4, which is struck and not cast, is of recent production.

3. *Obv.*—INNOCENTIVS . VIII . PONT . MAX. Bust of pope to right, tiara exactly like No. 2.

Rev.—ECCE . SIC . BENEDICETVR . HOMO. (Psalm cxxvii. 4). The pope seated, blessing a crouching figure, who has in his right hand a coronet, and is kissing the pope's foot; on the pope's right stands a cardinal, on his left there is another, seated, under whose feet are the initials of Paladino, the medallist, G. P. The floor is tessellated. In the exergue, ROMA.

Trésor de N. (Papes), Plate III. 5; Bonanni, vol. i. p. 107, iii.; Armand, vol. i. p. 298, 21.

Size 12.

The question, is, what personage can this be who is thus represented kissing the pope's foot, with the coronet in his hand, which is meant for his head? Venuti believed it to be Zizim, the Turkish refugee. Bonanni held otherwise, and I think rightly. He cites several contemporary writers to show that Zizim, when pre-

sented to the Pope, altogether declined thus to render homage. Bossi, Canon of Verona, who was an eyewitness, wrote thus after Zizim's arrival in Rome. "Non multos post dies publicum in Consistorium deductus ad Pontificis Maximiconspectum, conspicuo in throno sedentis, neque flecti ante illum neque deosculari ex more pedes, ut qui præsunt sacris ritibus illum facere edocebant, *omnino renuit ille.*" Again, Burchard, Pontifical master of the ceremonies at the time, and therefore no mean authority, says expressly of the same interview, "Venit per Consistorium coram Pontifice, et licet diceretur ipsum Turcum reverentiam Pontifici facturum, Turcorum more, terram manu tangendo, deinde manum osculando, *tamen illud facere recusavit*, sed in introitu consistorii, ubi genuflecti solet, *genuflectere noluit immo vix, et valde parum caput coopertum Pontifici inclinavit.*" With this evidence before us we shall do well with Bonanni to look elsewhere for an explanation of this reverse. He considered the kneeling figure to represent Ferdinand, Duke of Capua, nephew and heir presumptive of the King of Naples, who, together with his family, had been lying for some time under the censures of the Church, and who was in 1491 absolved. Thereupon Ferdinand hied to Rome to do homage, and was there received by Innocent with every mark of honour barring this. The medal was an afterthought, the work of the sixteenth century, so that after all some doubt may remain as to the correct identification of the prostrate figure, but it is a reverse which set before the eye that which every devout Roman dearly loved to see, and that which the legend of another medal, "OMNES REGES SERVIENT EI," aptly conveyed to the mind in words.

Bonanni, page 113, gives account of another medal of Innocent VIII., which has for a legend on the reverse

ARDVA VIRTVTEM, and exhibits an olive and palm-branch on the summit of an eminence. Venuti either did not know it, or so lightly regarded it, that we have no description of it from him. It is known to me only from Bonanni's description, and I confess I do not consider it worth more mention.

ALEXANDER VI. (Roderigo Borgia) 1492—1503.

In the Doge's palace at Venice, the Sala del Maggio Consiglio has round its walls a celebrated frieze on which are depicted the portraits of the Doges in succession, but there is one space, the space which should have been occupied by the portrait of Marino Falieri (1355) that is covered with a black veil, and underneath the veil is an inscription simply describing his crime and its punishment. In imitation of this treatment do I now propose to deal with the reign of Innocent VIII.'s successor, omitting the short biographical sketch for reasons well known, and restricting myself to little more than a description of his medals.

Roderigo Borgia was the son of Godfrey Lenzolio, a wealthy nobleman of Valencia, by Joan Borgia, sister of Calixtus III.

He was elected to fill the vacant chair in August, 1492, when he took the name Alexander VI. He died in August, 1503, as it is believed of the poison which he intended for Hadrian, Cardinal of Corneto.³

³ *Marino Sanuto*, vol. v., quoted in Ranke's *History of the Popes*, Appendix, Section I., No. 4. The medals of Alexander VI. receive little or no illustration from history, so that we can take them apart from the acts of his reign.

1. *Obv.*—ALEXANDER ∟ VI ∟ PONT ∟ MAX ∟ Bust of pope to the left, bareheaded, the pluviale with richly ornamented collar.

Rev.—Coronation of the pope, who sits under a baldacchino, enthroned; tiara is being placed on the pope's head by a cardinal. Figures to right and left; some on the left, armed, and one is mounted; behind, a building with archways. In exergue, the word CORONAT.

Trésor de N. (Papes), Plate III. 7; Bonanni, vol. i. p. 115.

Size 13.

The cardinal who officiated was Piccolomini; he was a nephew of Pius II., and became the Pope's successor. This medal has been attributed by the late Dr. Friedlaender to the Milanese artist, Ambrogio Foppa, surnamed Caradosso. By Venuti it was considered to be the work of Antonio Pollaiuolo, who died in 1498. It must be observed that it is the triregno, or triple crown, the papal tiara, which is in the hands of the officiating cardinal. Now, it must be observed further that on those medals which can properly be assigned to the fifteenth century, the papal tiara seldom appears; usually the pontiff is represented bareheaded. On the ECCLESIA medal of Nicolas V., by Guacciolotti, and on the GLORIA ISPAÑIE of Calixtus III., by the same artist, the Pope is wearing a mitre, and it is on the "GRAECI ET ARMENI" medal of Eugenius IV. that the papal tiara first appeared; but then, is that medal, though early, really as early as the reign of Eugenius? Paul II.'s great consistory medal has the Pope crowned with the tiara, as also have the reverses of the "AVDIENTIA PVBLICA," and two others of his medals. In the reign of Sixtus IV., the use becomes more frequent, and yet only then first does the crowned head of a pope appear on the obverse. Afterwards the use grew and

became common. Of course it had its significance, and we find Bonanni bestowing half a dozen pages on the coronation medal of Alexander to explain the significance, and to date the assumption of the triple crown by the popes. To this effect he quotes these words of Angelus Rocca, "Cum Summus Pontifex coronatur, Capiti ejus Tiara, quam 'Regnum Mundi' appellant, imponitur, tribus constans coronis tres potestates, hoc est, Imperatoriam, Regiam, et Sacerdotalem, plenariam scilicet, et universalem totius orbis auctoritatem, repræsentantibus." I do not think the subject worth dwelling on; without Bonanni we can see that underlying the use of the papal diadem there is a reference to the Book of Revelation xix. 12. Yet we should I apprehend grievously mistake the "many crowns" which the Apostle St. John saw (v. 12) on the head of the *Λόγος τοῦ Θεοῦ*, if we were to imagine the crowns there mentioned to be that strange structure which is seen built up in a papal tiara, and which not even deft Italian art can render sightly. The fact being, that the word *διάδημα* (diadem, crown) conveyed to the mind of the ancients no such idea as that which is given us by the *triregno*, or triple crown; it was simply a linen band, or fillet (*fascia*) bound round a king's brow; and this, and nothing more than this, was to them the "*Βασιλείας γνώρισμα*,"—the distinctive mark of king-dom.

2. *Obv.*—ALEXANDER . VI . PONT . MAX . IVST . PACIS .
Q . CVLTOR. Bust to the left, head bare, pluviale with collar richly ornamented.

Rev.—ARCEM IN MOLE . DIVI . HADR . INSTAVR .
FOSS . AC . PROPVGNA CVLIS . MVN. Castle of St. Angelo, from the towers on either side a flag is flying bearing the papal insignia; above the great central tower is the figure of the Archangel Michael, with drawn sword in his hand.

Trésor de N. Méd. Ital. Pt. I. Pl. xxv. 5; Keary, *Guide to Italian Medals*, B.M., p. 81; Bonanni, vol. i. p. 115; Venuti, p. 42; Armand, vol. ii. p. 68, 10.

Size 15.

This medal is likewise cast. Its interest lies in the representation which it affords us of the ancient castle of St. Angelo, for the history of the castle would be an epitome of the history of Rome itself during the Christian era. Originally it was the sumptuous mausoleum erected by the Emperor Hadrian to receive his own remains, but it became also the depository of the ashes of a number of his successors, Antoninus Pius, Marcus Aurelius, Commodus, Septimius Severus, Géta, and Caracalla. When the basement of this building was laid open on one side, in the year 1825, they found it contained in the centre two huge sepulchral chambers, the doorway of which stood opposite the Pons Ælius, the bridge constructed by Hadrian as an approach to the mausoleum. Its walls are of enormous thickness, and still retain traces of the marbles and mosaics with which the interior was embellished. Procopius, the Greek historian and secretary to Belisarius, saw it in the sixth century, and is quoted in a book I have—Donato's *Roma Vetus ac Recens*—to show how in his time it had been turned into a fortress, but without injury to its decorations. The injury came afterwards, and from the hands of its defenders. "That venerable structure," wrote Gibbon, "which contained the ashes of the Antonines, was a circular turret rising from a quadrangular base; it was covered with white marble of Paros, and decorated by the statues of gods and heroes; and the lover of the arts must read with a sigh that the works of Praxiteles or Lysippus were torn from their lofty pedestals and hurled into the ditch on the heads of the besiegers."⁴

⁴ *Decline and Fall of the Roman Empire*, vol. v. p. 188.

But in the introduction to Vasari's *Lives of the Painters* it is asserted the mausoleum also suffered despoilment to build the churches of the Christian faith, its columns of marble being taken for that purpose. In later ages it formed the stronghold of the popes; so, when on the last day of the year 1494, the young King of France, Charles VIII., entered Rome by torchlight, on his Neapolitan expedition, lance on knee, as though it were a hostile city, Alexander VI. prudently betook himself to the shelter offered him by the castle. One Sunday in October of that year its great central tower was struck by lightning, and the upper portion, together with the marble figure of St. Michael, was dashed to a distance. It was that which led to the restoration and re-construction, which is commemorated on this medal. Alexander raised the tower and strengthened the fortifications. For this work he employed the architect Antonio San Gallo, and Vasari relates how it obtained for him great credit with the Pope and with his son, Cæsar Borgia. The work was finished in 1497.

A medal akin to this is included by M. Armand in his list, vol. ii. p. 63, which, he tells us, is in the Archæological Museum at Madrid; but I find no mention of it in the early writers. It has on the obverse the bust of the Pope, and on the reverse the castle of St. Angelo, with the somewhat enigmatic legend, MO . AD . VAL . FO . S . PROP . COR . Q . C. —

3. *Obv.*—ALEXANDER √ VI √ PONT √ MAXIMYS √
Bust to the left, head bare, clothed in pluviale.

Rev.—OB . SAPIENTIAM . CVM . FORTVNA . CONI-
VNCT. An ox (the Borgia arms); in the air a winged genius who spreads a sail, which appears filled by the wind, and at the same time places a crown on the head of the ox.

Trésor de N. Méd. Ital. Pt. I. Pl. XXV. 4 ;
Bonanni, vol. i. p. 115; Venuti, p. 43; Armand,
vol. ii. p. 63, 9.

Size 11.

A complimentary medal, emblematic of Borgia's good fortune, and indicating the causes of his success in life. According to a diarist of the time, "no man ever proposed matters with more art, or drew others with more ease into his sentiments." His administrative powers and versatility seldom have been exceeded. To this eulogy I shall allow Onofrio Panvinio to make an addition in his own words: "Si quando negotiis non premeretur omni se jucunditatis generi sine discrimine dedit. Mulieribus maximè addictus, ex quibus quatuor filios et duas filias tulit." His appearance in the portrait we have on his contemporary medals does not belie this description. I have never seen an example of No. 3, but in the books it is described as cast.

4. *Obv.*—ALESSANDRO * VI * PONT * MAX * Bust to the left, bareheaded, clothed in pluviale, on the ornamental collar of which is the figure of a saint, and on the groundwork the heads of cherubim.

Rev.—CITA . APERITIO . BREVES . ÆTERNAT .
DIES . (in the exergue). The Pope breaking open the "Porta Sancta," as on a corresponding medal of Sixtus IV., already described (*Num. Chron.*, 3rd S., IV., p. 187). Here, likewise, appears on the sill of the door the signature of G. PALADINO.

Size 13.

The superior condition of this medal enables me to add to my description of the other, for I find that among the clouds from which descend rays of light on the Pope and his company, are the heads of cherubs. There is no mention made of this medal either in the pages of Bonanni, Venuti, or M. Armand.

5. *Obv.*—ALESSANDRO * VI * PONT * MAX * The pope bareheaded, his pluviale ornamented as on No. 4.

Rev.—RESERAVIT . ET . CLAVSIT . ANN . IVB. In the exergue, M . D . The pope, surrounded by his cardinals, is seen placing the first stone of the wall which is to close again the "Porta Sancta."

Bonanni, p. 115, 4; Venuti, p. 44; Armand, vol. i. p. 298, 23.

Size 13.

Venuti reveals some inaccuracy in this reverse, because, as a matter of fact, the Pope was not present at this ceremony; he was ill of gout, and his place was taken by two cardinals.

6. *Obv.*—ALESSANDRO * VI * PONT * MAX * The bust to the left, bareheaded, &c., as on No. 4.

Rev.—RODERICO * LENZVOLA * D * BORGIA * SP * M * CD * XCII * * * Arms of the Borgia family surmounted by the keys and tiara. Or, party per pale; first, an ox passant, for Borgia; second, three bars, argent, for Lenzolio.

Trésor de N. (Papes), Plate III. 6; Venuti, p. 42; Bonanni, p. 115, 2; Armand, vol. i. p. 298, 22.

Size 12.

It must be remembered that Alexander VI. was a Spaniard, Lenzolio or Lenzuola, and it may be questioned whether he did any kindness to the Borgias when he assumed that name as his patronymic.

Besides these there is another medal, which appears in M. Armand's list (vol. ii. p. 64, 12), which has on the reverse a Greek cross adorned with nine rosettes, and without legend. This medal is unnoticed by Bonanni and Venuti. I only know it from M. Armand's description, and the illustration in the *Trésor de N. Méd. Ital.*, Pt. I., Pl. XXV. 3. From the character of the reverse we must, I conceive, place it among the late medals, although the rosette appears as an ornament on the della Rovere medal of Sixtus IV.

NOTICES OF RECENT NUMISMATIC PUBLICATIONS.

The *Revue Numismatique*, 1886, Part IV, contains the following articles:—

1. J. P. Six. Lycian Coins (continuation).

2. E. Babelon. On the coins of the towns of Asia Minor bearing the name of Comana and Comama. These are (i.) Comana in Pontus, which, under the Romans, bore the surname of Hierocæsarea. The coins read **KOMANΩN**, and after the time of Sept. Severus, **ΙΕΡΟΚΑΙΣΑΡ. ΚΟΜΑΝΕΩΝ**. (ii.) Comama in Pisidia, which received a Roman colony under Augustus. The coins read, **COL · AVG · COMAMA**, **COL · IVL · F · COMAMA**, and **COL · IVL · AVGG · F · COMAM-ENORVM**. (iii.) Conane in Pisidia, of which the coins bear the legend **KONANEΩN**. (iv.) Comana in Cappadocia, distinguished, by the epithet Chryse, from its colony of the same name in Pontus. To this town no coins bearing the name of Comana can be attributed, but as the town bore also the name of Hieropolis, it is possible that some of the coins with the legend, **ΙΕΡΟΠΟΛΕΙΤΩΝ**, &c., given to other towns of this name, may belong to it.

3. Th. Reinach. Essay on the Numismatics of the Kings of Cappadocia. In this paper the author brings to a conclusion his valuable researches in the history and coinage of the regal series of Cappadocia. As an appendix he gives careful genealogical tables of the three dynasties which successively ruled over Cappadocia between the time of Alexander the Great and the Constitution of the Roman Province of Cappadocia in A.D. 17.

4. P. Lambros. Discovery of the gold ducat of the Grand Master of Rhodes, Dieudonné de Gozon, 1346—1353.

5. J. Roman. Classification of the episcopal coins of Saint-Paul-Trois-Châteaux.

The *Revue Numismatique*, 1887, Part I, contains the following articles:—

1. J. P. Six. Lycian Coins (conclusion).

M. Six in these articles has compiled a mass of information on the coins of ancient Lycia which can hardly fail to elicit in due course still further material for the numismatist and the historian to work up. He has shown most clearly that the

inscriptions on the Lycian coins, which Fellows took to be the names of cities, are in reality, with very few exceptions, the names of dynasts or rulers of the various communities or city leagues into which Lycia, in the fifth and fourth centuries B.C., was broken up. Each petty local dynast seems to have possessed the right of coinage within his own territory. But at the same time there existed undoubtedly a wider league which united the whole country in a more or less binding confederacy, the symbol of which was the well-known Lycian *Triskelis*, composed, as M. Six will have it, of two or four serpents interlaced. Historically, the coins which bear the names of Lycian dynasts range from about B.C. 450 to 362, when Lycia fell under the dominion of Mausolus, the Satrap of Caria. M. Six's chronological classification, by style, of the coins within this period, leaves nothing to be desired, and may be accepted without hesitation as almost minutely correct; but when he attempts a geographical distribution of some dynasts to Telmissus, of others to Xanthus, Patara, Antiphellus Limyra, &c., it appears to us that he is working upon a less solid foundation. In many, perhaps in most, cases his guesses may turn out to be right, but in the present state of our knowledge it seems on the whole safer not to hazard any hypotheses with regard to the local attribution of the greater number of the forty or fifty names of Lycian rulers which are for the most part only known to us from the coins. Turning to the Lycia of more recent times we note with much satisfaction that M. Six has demolished the theory of the alliances of separate pairs of Lycian towns supposed to be indicated by such inscriptions as **KP-ΞΑΝ**, **KP-ΠΑ**, **KP-ΤΑΩ**, **ΜΑ-ΜΥ**, &c. Cragus and Masicytus, as M. Six points out, are not town names at all, but those of two mountain ranges which gave their names to the two principal districts into which Lycia was at that time divided. The above-mentioned inscriptions do not, therefore, mark alliances between the towns of Cragus and Xanthus, Cragus and Patara, Cragus and Tlos, or between Masicytus and Myra, but rather assert that the coins were issued by the Cragian division of the Lycians inhabiting Xanthus, Patara, Tlos, &c., or by the Masicytan division inhabiting Myra, &c.

We welcome M. Six's article as the most important contribution to the study of Lycian numismatics and history which has yet appeared, and it is now for the first time possible to arrange our series of Lycian coins in their true historical order.

2. Westphalen (Comte de). The date of the accession of Constantine the Great according to Eusebius and the coins.

3. Deschamps, de Pas (L.). Some observations on the coins of Fauquembergues struck by Eléonore, châtelaine of Saint-Omer shortly before A.D. 1315.

4. Danicourt (Alfred). On medals, &c., of tin and lead discovered in Picardy. Among the specimens engraved is a curious piece with a king in a ship copied from an Angel or Noble of Richard II or III, bearing the legend RICSART KIENG OF INGLANT.

5. Schlumberger (G.). On a new coin of the Danishmend Emir of Cappadocia, Dhu-l-Karnein, about the middle of the twelfth century, bearing a Greek inscription.

6. Valton (P.). On a fifteenth-century medal of Jacopo Galeota, made at the Court of Burgundy during the reign of Charles the Bold.

The *Annuaire de Numismatique*, Jan., Feb., 1887, contains the following articles :—

1. Revillout (M.). Letter to M. Lenormant on the relation between gold and copper coins to silver coins under the Ptolemies. M. Revillout shows that the proportion of 1 to 12½ between gold and silver, and 1 to 60 between silver and copper, recognised by Letronne and Mommsen, must be now definitely abandoned in favour of 1 to 10 between gold and silver, and 1 to 120 between silver and copper.

2. Hermerel (J.). On a find near Troyes of anonymous feudal coins of Champagne (Troyes, Meaux, Crespy, Provins, Sens, Chartres, and Orleans), dating from the early part of the eleventh century.

3. Troutowsky (W.). On an unpublished coin of Abu Saïd Behadur Khan (1451—1469), in the collection of the Imperial Hermitage at St. Petersburg.

4. Barbier de Montault (Ch.). On Papal *dénéaux* or patterns (Clement VII to Pius IX).



VI.

NEW GREEK COINS OF BACTRIA AND INDIA.

It is scarcely a year since the British Museum Catalogue of Coins of the Greek and Scythic Kings of India appeared; but already the Museum has acquired some very important additions to the series there published.

First among these must be mentioned a most interesting and wonderful *décadrachm* found two or three years ago at Khullum, in Bokhara, and presented to the British Museum by Mr. A. W. Franks. Its authenticity seems to be above suspicion. Its description follows:—

Obv.—Macedonian horseman, wearing conical helmet and cuirass, charging with lance couched an elephant retreating r., bearing on his back two gigantic warriors, one of whom seizes the lance as it penetrates his back; the other, with raised hand, threatens the enemy with some weapon.

Rev.—A king, as Zeus, standing l. He is clad in Persian cap (?), cuirass, and cloak; a sword hangs at his waist; he holds in r. hand a thunderbolt, in l. a spear; in field l. Σ .¹

\mathcal{R} . 1·4. Wt. 653 grains. (Pl. VII., 1.)

Looking for the first time at this extraordinary coin, or rather medal—for it is clearly a historical monument—everyone will be tempted to exclaim, “Alexander and Porus!” I do not, however, believe that this is the correct explanation of the obverse type, though the true explanation is scarcely less interesting.

Let us first consider the place of issue and date of the coin. It is fairly certain that it was found on the north of the Paropamisus, and its art and fabric are like those of the coins of the early Antiochi, which come from that region. It would seem, then, to have been certainly issued in Bactria, and not in India; and as it was issued by Greeks, it must be given to the period between Alexander’s invasion of B.C. 330 and about B.C. 125, when Bactria passed finally into the hands of the Yueh-chi.

This date is confirmed by considerations of style. The horseman of the obverse, with his firm, vigorous seat, clearly belongs to a period earlier than that which produced the horsemen of the coins of Philoxenus and Hippostratus; the elephant, too, is of excellent style. The contrast between the Hellenic warrior and his barbarous foes is admirably rendered. When we turn the piece, we find a somewhat

¹ Or Σ , for there seems to be a trace of a second B after the A as well as of one before it. It looks as if the die-engraver had begun to make the B after the A, and then abandoned his intention and made it in front instead.

inferior style; the standing king reminds us not a little of the king on coins of Kadphises and Kanerkes, and his cloak hangs as a background—just like cloaks on their coins. But we must not press this likeness; after all it only shows from what school the Kushan kings procured the artists who made their coins—from Bactrian rather than Indian cities.

After considering place of mintage and style we have next to find an explanation of the types: here we will begin with the reverse. We can scarcely be mistaken in discerning in the deified standing king Alexander the Great, who was represented by Apelles, the painter, as holding a thunderbolt. He is fully armed as a cavalry soldier, wearing cuirass and chlamys, but no greaves; a sword is slung round his body; on his head, in place of a helmet, is what seems to be a Persian mitra, with long ends hanging over the neck. This Persian head-dress must contain a reference to Alexander's position as successor of the great Kings of Persia. The letters **AB** or **BA**, which constitute the whole legend of the coin, do not afford us any safe clue for its attribution. We may perhaps read them *Βασιλεὺς Ἀλέξανδρος*, or we may consider them as an abbreviated form of **ABID**, which appears on certain eastern coins of Antiochus I.²

Turning to the obverse we find a life-like battle scene. A horseman, who is every inch a Greek, pursues and pierces with his lance a gigantic foe seated on an elephant. On the back of the elephant is a second rider, who seems to threaten the charging foe with some weapon. As to the nationality of these barbarous elephant-riders there can, I think, scarcely be a dispute. Their physiognomy

² *Num. Chron.* 1880, p. 190.

is not Indian, but exactly like that of the Kushan kings, Kadphises and Kanerkes, on their coins, and they wear not a moustache only in Indian fashion, but full beards like the Scythic kings. The coarse and brutal type of features is not to be mistaken, and is well interpreted by the Greek artist.

It may perhaps seem strange that if the barbarians are Scythic, they should be seated on an elephant; the elephant being essentially the war-beast of the Indians, and not to be expected in an army of invaders coming from the north. But this rule does not hold good for the period after Alexander the Great. The Seleucid kings of Syria had a large stud of elephants at Apameia, and Pyrrhus even introduced them into Italy. In the wars between the kings of Pergamon and the Gauls they were much used. In fact, during the whole period between Alexander's invasion of Asia and the Roman conquest, they were considered in the East as a most valuable instrument of war. That the Scythic invaders of India fully appreciated them is certain; for Kanerkes and Hooerkes on their coins hold the ankus, or elephant-goad, and the latter rides an elephant: an elephant also makes its appearance on coins of Maues and Azes.

The present type obtains a fuller meaning, if one goes to it direct from descriptions of ancient battles in which elephants and cavalry met one another. Horses, as we learn, could never face elephants, being inspired with terror by their trumpetings and their vast size. To follow up an elephant even when retreating, would be a bold deed in a Greek horseman, to spear his rider would be a great feat of arms. When Porus fled from the battle by the Hydaspes, Alexander sent many heroes to pursue him, but he does not seem to have been stopped

until he voluntarily surrendered to his fellow prince, Meroes.

There can be little doubt that this remarkable decadrachm was struck on the occasion of some notable victory won by a Greek King of Bactria over the invading hordes of Yueh-chi in the second century B.C. The victory had but a temporary effect; but that is a kind of fact which a victor seldom lays to heart. He may have fancied that the barbarous invaders were put to flight for ever.

Which king was it who won the victory thus celebrated? This question we cannot with certainty answer, but indications are not entirely wanting. The only horsemen depicted on Greek coins of the far East who closely resemble the horseman of the present coin are the Dioscuri on coins of Eucratides, who resemble him alike in style and attitude.³ And the reverse-type used by Eucratides' son Heliocles is the figure of Zeus standing holding thunderbolt and sceptre, a figure in general scheme closely like the Alexander-Zeus of the present coin. These shreds of evidence, though their importance must not be exaggerated, seem to indicate that the issuer of the coin was Eucratides or Heliocles.

Somewhat more than a year ago a find of didrachms of the Greek kings, Diomedes, Strato, Philoxenus, and Hermæus, came to light in the neighbourhood of Rawal Pindi. Of how many coins the find consisted is not known: the British Museum has been successful in acquiring some important and unpublished specimens:—

³ It is by no means impossible that the horseman of our coin may be one of the Dioscuri; they wear conical hats, but the chlamys rather than the cuirass.

DIOMEDES.

2. *Obv.*—**ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΔΙΟΜΗΔΟΥ.**
Bust of the king r. diad.

Rev.—Maharajasa tradatasa Diyamedasa. The Dioscuri holding palms, and with lances couched, charging r.; below, monogram \oplus .

\mathcal{R} . 1.05. Wt. 146. (Pl. VII., 2.)

3. *Obv.*—Inscr. as last. Bust of the king, helmeted, and wearing ægis, thrusting l. with spear.

Rev.—As last.

\mathcal{R} . 1. Wt. 144.7. (Pl. VII., 3.)

Hitherto only small coins of Diomedes have been published.

STRATO I.

4. *Obv.*—**ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΔΙΚΑΙΟΥ ΣΤΡΑΤΩΝΟΣ.** Bust of the king r., diad.

Rev.—Maharajasa tradatasa dhramikasa Stratasa. Pallas, facing, armed, hurls thunderbolt with r. hand. On l. arm is an ægis; to l. monogram \wp .

\mathcal{R} . 1.05. Wt. 145.8. (Pl. VII., 4.)

5. *Obv.*—Same inscr. Bust of the king, r., bearded, diad.

Rev.—Same inscr. Pallas, l., hurls thunderbolt with r., an ægis on l. arm; to l. monogram \wp .

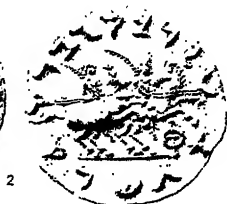
\mathcal{R} . 1.05. Wt. 146.1. (Pl. VII., 5.)

6. *Obv.*—**ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΚΑΙ ΔΙΚΑΙΟΥ ΣΤΡΑΤΩΝΟΣ.** Bust of the king r., diad. and helmeted.

Rev.—As last.

\mathcal{R} . 1.05. Wt. 143.6. (Pl. VII., 6.)

These are new varieties. The facing Pallas of No. 4,





the bearded king's head on No. 5, the helmeted king's head on No. 6 are all new.

STRATO AND AGATHOCLEIA.

7. *Obv.*—**ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΣΤΡΑΤΩΝΟΣ
ΚΑΙ ΑΓΑΘΟΚΛΕΙΑΣ.** Busts of the king
and queen, jugate, r. diad.

Rev.—Maharajasa tradatasa dhramikasa Stratasa. Pallas l.
armed, thunderbolt in raised r. hand, ægis on l.
arm; to l., monogram ϙϙ.

Æ. 1·05. Wt. 144·5. (Pl. VII., 7.)

Copper coins have been published with the head of Agathocleia; but this is the first time that her head has appeared in conjunction with that of Strato. The portrait is in this case far more distinctive than that of the copper pieces.

PHILOXENUS.

8. *Obv.*—**ΒΑΣΙΛΕΩΣ ΑΝΙΚΗΤΟΥ ΦΙΛΟΞΕΝΟΥ.**
Bust of the king l. helmeted and wearing ægis;
thrusting with spear.

Rev.—Maharajasa apadihatasa Philasinasa. King on horse-
back r.; beneath ΣΞ.

Æ. 1·05. Wt. 145. (Pl. VII., 8.)

The type of a king thrusting with a spear, familiar to us on coins of Eucratides and Menander, was not known in the case of Philoxenus.

HERMÆUS.

9. *Obv.*—**ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΕΡΜΑΙΟΥ.** Bust
of the king r., helmeted, diad.

Rev.—Maharajasa tradatasa Heramayasa. Zeus radiate,
seated l. on throne; r. hand extended, in l.
sceptre; to l. ϙ.

Æ. 1. Wt. 140·2. (Pl. VII., 9.)

The other didrachms of Hermæus bear an unhelmeted head.

A remarkable feature of the whole find is the degree in which the coins of which it is composed seem to be contemporary. There is no marked difference in style and fabric between those of Diomedes and those of Hermæus; nor do the coins which we should suppose to be most ancient show more signs of having been long in circulation than do those which we should consider most recent. If we suppose that the hoard was buried in the early part of the reign of Hermæus, about B.C. 50 or 40, we may fairly conclude that the other kings, Diomedes, Strato, and Philoxenus, belong to the earlier half of the first century B.C.; and to this period I had already assigned them in the British Museum Catalogue, p. xxxiii.

PERCY GARDNER.

VII.

THE EXCHANGE-VALUE OF CYZICENE STATERS.

IN Mr. Greenwell's very complete paper on these coins, in the last number of the *Chronicle*, one point is treated in a less conclusive way than others,¹ namely, their exchange-value; and to this subject I propose to return.

I do not quite agree with the construction which Mr. Greenwell puts on the passages of Demosthenes which he cites. First comes the passage in Demosthenes' Oration against Phormio (p. 914) which is not easy to understand. The question raised in it is whether Phormio has or has not paid to one Lampis in Bosphorus a debt of 2,600 Attic drachms. Phormio declares that he has paid it by means of 120 Cyzicene staters; to which Demosthenes replies that this is on the face of the thing absurd, for a Cyzicene stater being worth 28 Attic drachms, 120 of them are equivalent to 3,360 drachms, and so would be an overpayment of 760 drachms. Demosthenes states distinctly that the value of 28 to 1 held in Bosphorus, and as we have not Phormio's speech, we have no means of checking the statement; but we may strongly suspect that Demosthenes was misleading the jury, that 28 to 1 was the ratio

¹ Above, p. 17.

holding at Athens between the Cyzicene and the drachm, and so familiar to the jurors, but that the relation at Bosphorus was what Phormio evidently supposed it to be, $\frac{2600}{120}$, that is, nearly 22, or exactly, $21\frac{2}{3}$ to 1.

In two passages of Xenophon's *Anabasis* (v. 6, 23 ; vii. 3, 10) a Cyzicene a month is spoken of as the pay of mercenaries, but it does not appear from the context whether this pay was regarded as high or low. The normal pay of mercenaries in Persia at the same time was a daric a month (*Anab.*, i. 3, 21).

With regard to the value of the daric we have more satisfactory information. We have reason to believe that from the earliest times down to those of Xenophon (*Anab.*, i. 7, 18) a daric was equivalent to 20 Persian silver sigli of 86 grains. And as we learn from another passage that in Xenophon's time (*Anab.* i. 5, 6) the siglos was regarded as equal to $1\frac{1}{4}$ Attic drachms, we may conclude that a daric was rated in Persia as equivalent to 25 Attic drachms.

At an earlier time (B.C. 434) a didrachm of pure gold (daric) was regarded at Athens as equivalent to 28 drachms of silver (Koehler, *C. I. A.*, p. 160).

All our data seem to imply that the value of the daric and the Cyzicene was the same; and this probability seems to be increased when we consider the history of the introduction of silver at Cyzicus. The earliest silver was beyond doubt issued while the electrum staters were the main coinage of the city—probably about B.C. 400. The weight chosen for them is the Phœnician standard of about 232 grains, which Brandis considers as introduced in various cities of Asia Minor because of the convenient relations obtaining between silver coins of that weight and the daric—the proportion of value being 2 to 15.

That a system based on the daric should be introduced at Cyzicus seems to prove that the stater of Cyzicus was equivalent to the daric.

The identity of value of daric and Cyzicene is on the whole confirmed by the results of analysis. The daric consists of almost pure gold, but in the analysis of the Cyzicenes there is great variety. As yet Cyzicene staters have not been chemically analysed; but an attempt has been made to determine their purity by means of their specific gravity. The results of a series of weighings in water have been published by Dr. Hofmann in the *Numismatische Zeitschrift* for 1884 and 1885. Of five Cyzicene staters weighed by this *savant* the purest contained 52·25 per cent. of gold, the least pure 38·44 per cent.; the mean was nearly 46 per cent. Of five hectæ and half hectæ weighed, the extremes of purity were 52·07 and 42·67, the mean purity 48 per cent.

Other weighings published by Dr. Hultsch (*Zeit. f. Num.*, xi., 165) appear to show a slightly lower standard of purity than that discovered by Dr. Hofmann. I have myself obtained accurate weighings in air and water of some Cyzicene staters, through the kind aid of Mr. H. A. Miers, of the Department of Mineralogy in the Natural History Museum. The result is as follows :—

			Weight in grains.			Specific Gravity.	Approximate Proportion.	
			In Air.	Water 60° F.	Difference.		N	Æ
<i>Archæic.</i>								
1. Stater.	Tunny with fillet . . .	Plate I. 1	252.98	235.32	17.66	14.325	58.7	41.3
2. Hecta.	Head of tunny . . .	„ VI. 27	41.31	38.33	2.98	13.862	53.3	46.7
<i>Early class.</i>								
3. Stater.	Chimæra . . .	„ V. 12	254.03	234.56	19.47	13.005	43.	57
4. „	Winged figure running . . .	„ III. 8	247.59	227.63	19.96	12.404	33.8	66.2
5. „	Head of Pallas, Corinth. helmet	„ II. 2	249.27	229.93	19.34	12.888	40.8	59.2
<i>Later class.</i>								
6. „	Head of goat . . .	„ V. 29	247.66	229.45	18.21	13.597	50.1	49.9
7. „	Satyr pouring wine . . .	„ II. 20	247.84	228.94	18.90	13.113	43.9	56.1
8. „	Head of Pallas, Corinth. helmet	„ II. 5	246.70	228.05	18.65	13.228	45.4	54.6

Here the first three columns give the results of the weighings, accurate to the hundredth of a grain; the fourth column gives the specific gravity. From these data I have determined the approximate proportions of gold and silver by aid of the formulæ given in Dr. Hofmann's papers. Any exact statement must be misleading, as there are two error-producing elements present in the case of every coin; we do not know the proportion of copper or other metal present in each coin, and we do not know to what extent the fact of electrum being a mixed metal may alter its specific gravity.

The result of the presence of these two elements of disturbance is that the proportion of gold actually existing in the coins is higher than appears from our calculations; but the inaccuracy is not very great, it may perhaps amount to 3 or 4 per cent.

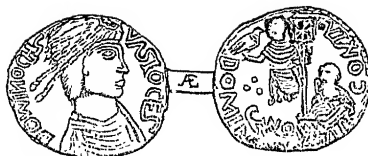
Our experiment shows (α) that the archaic electrum coins of Cyzicus (1 and 2) are of decidedly purer alloy than the later issues; (β) of 6 staters (3 to 8) of the ordinary issues, the average composition is *N.* 43·5, *Ar.* 56·5; or neglecting No. 4, which is exceptionally base, *N.* 45, *Ar.* 55 per cent.

Putting side by side the results of this series of weighings and that of Dr. Hofmann, the fairest conclusion seems to be that the ordinary proportion of gold and silver is 46 and 54. Taking the weight of a Cyzicene stater at 254 grains we have the following results: 46 per cent. of gold = 117 grains of gold; 54 per cent. of silver = 137 grains = 10 grains of gold; total value 127 grains of gold, which is almost exactly the weight of the daric.

Hence the results of analysis entirely confirm the equivalence of the Cyzicene and the daric. And it seems that in the time of Xenophon either of these coins passed at

Athens as equivalent to 28 Attic drachms, at Panticapæum as equivalent to 22 Attic drachms, and in Persia as equivalent to 25 Attic or 20 Persian drachms. These various values agree well with the circumstances of each place cited: at Athens silver was common and gold rare; at Panticapæum gold was common and silver rare; while in Persia neither metal was scarce. The variety seems enormous to a modern; but we must remember that in ancient days the transport of precious metal was a matter of great risk and difficulty. At Cyzicus the electrum staters would pass for $7\frac{1}{2}$ of the silver staters of the city.

PERCY GARDNER.



VIII.

ON A COIN OF A SECOND CARAUSIUS, CÆSAR IN BRITAIN IN THE FIFTH CENTURY.

THE remarkable bronze coin of which the engraving appears above happened to strike my observation amongst a lot of Roman and Romano-barbarous coins found at Richborough, the famous Portus Rutupis or Rutupiæ of the ancients. The obverse presents a head modelled in a somewhat barbarous fashion on that of a fourth-century Emperor, diademed and with the bust draped in the *paludamentum*. The legend, reading outwards, is :

DOMINO CARAVZIO CES (the AR, VZ, and ES in ligature).

The reverse presents a familiar bronze type of Constans or Constantius II. The Emperor holding phoenix and labarum standard stands at the prow of a vessel, the rudder of which is held by Victory.¹ In the present case, however, in place of the usual legend that accompanies this reverse—FEL . TEMP . REPARATIO—appears the strange and unparalleled inscription—

DOMIN . . . CONTA . . . NO.

¹ The Emperor's legs are omitted, as also a part of the forepart of the vessel, as if to make room for the inscription, NO.

The last three letters of CONTA . . . are in contiguity, followed by uncertain traces of another, and the NO is placed over the fore part of the vessel; in the field to the left are apparently three pellets. The exergual inscription is invisible. The coin bears traces of having been washed with white metal, and it weighs $42\frac{1}{4}$ grs.

It will be seen at once that, though both in its obverse and reverse designs approaching known fourth-century types, the present piece is not a mere barbarous imitation of a coin of Constans or Constantius II. It presents us, on the contrary, with a definite and wholly original legend of its own. The name of the Cæsar represented is clearly given as Carausius, but the whole character of the design and the reverse type, which only makes its appearance on the imperial dies towards the middle of the fourth century, absolutely prohibit us from attributing it to the well-known usurper who reigned from 287 to 293, and who, moreover, always claimed the title of Augustus.

The present official style is wholly unexampled on a Roman coin. D . N for DOMINVS NOSTER becomes of course usual on coins from Constantine's time onwards, and DOMINOR . NOSTROR . CAESS is also frequent, but the title DOMINO, standing alone without qualifying pronoun, as it appears on this coin, is as exceptional a phenomenon as the legend on the remarkable piece of an earlier date, in which the titles DEO ET DOMINO are coupled with the name of Aurelian.²

The CONTA . . of the reverse is enigmatic. The Romano-British tendency, of which other examples will be given, to omit unaccented i's in certain positions, would make COMT . . (which, owing to the ligature of the N and

² DEO ET DOMINO NATO AVRELIANO AVG.

T, is a possible version of the legend) a thoroughly legitimate abbreviation for COMIT . . in the same way as on a Roman inscription found in Britain we find MILTum for MILITum. But a numismatic reference to a COMES AVGVSTI other than a god does not exist, and we can hardly venture to look for it even on so exceptional a piece as the present. I will leave it, therefore, for others to detect upon our coin the sentinel form of a *Comes Littoris Saxonici* looking forth from the prow of his galley in expectation of the Saxon pirate, and will content myself with the suggestion that either an S has been carelessly omitted, in which case CONTA . . stands for CONSTA, or that the X-like crossing of the second and third stroke of the N indicates the presence of an X. According to the analogy of late Romano-British inscriptions, an X may stand for an S, and we should have here CONXTA . . = CONSTA; as on a Romano-British monument we find CELEXTI for CELESTI.³ The effaced traces of letters which follow I venture to read NTI in ligature, and if the NO above the prow of the vessel, which evidently forms the continuation of the legend, be joined on to the rest, we get the form CONXTA[NTI]NO for CONSTANTINO.

The prototype of the reverse design of our coin, representing the Emperor standing on the prow of a galley steered by Victory, and holding the phoenix and labarum standard, is one of the commonest of the fourth-century imperial types, and its date can be fixed within certain limits. The issue of the class of coins to which it belongs is contemporaneous with the last period of the reign of the

³ *Inscriptiones Britannicæ Christianæ*, 128. Similarly on African inscriptions, MILEX for MILES, XANC(tissimo) for SANC(tissimo), on Italian XANTISSIMVS, &c.

Emperor Constans, and the contemporary portion of that of Constantius II. It is not found on the coins of Constantine the younger, who met his death in 340 A.D. On the other hand, at the moment of Constans' murder, and the consequent accession of Magnentius in 350, it seems to have been already superseded by the allied type on which the phoenix is replaced by a globe and Victory. On the coins of Magnentius, as on those of Constantius Gallus, who was associated by Constantius II. in 351, only this later variety appears.

We are thus enabled to establish a *terminus a quo* in two directions for the period during which the class of coins that supplies the prototype of the present piece was issued from the imperial mints. Its emission cannot well have been earlier than 340 or later than 350 A.D. But there seem to me to be sufficient grounds for fixing the date of this type within still narrower limits. Evidently it records a maritime expedition; and in the case of the Emperor Constans this maritime expedition is not far to seek. In other words, it must refer to Constans' passage to Britain in 343 in answer to the appeal of the hard-pressed Provincials—one of the most important episodes in his reign, as may be gathered from the reference to it in the later books of Ammianus Marcellinus;⁴ though, alas! a full account of it, recorded in an earlier book of the same author, together with his notice of British geography, has perished. The connexion of the present type with this British expedition is rendered still more probable by its close analogy with a more elaborate composition on a contorniate medal of the same Emperor, which was certainly commemorative of that event. On

⁴ *Lib.* xx. l. 1; xxvii. 8, 4.

the reverse of this medal the Emperor stands on a galley, in the attitude of a champion, armed with spear and shield. Behind him are two standards, and the prow is headed by a Victory holding a wreath. A nymph directs the course of the galley, and behind is a tower, explained by the inscription BONONIA OCEANEN. — *Bononia Oceanensis*, as Boulogne-sur-Mer seems to have been known, to distinguish it from its namesake of the Æmilia. Bononia was the natural crossing point for Britain; and accordingly we find a law of Constans in the Theodosian Code, dated from that city in January 343.⁵ By the end of June, in the same year, as we know from the same source, Constans was back again at Trier.⁶ Assuming this maritime expedition of Constans to have given occasion to the issue of the above class of coins their date of emission is further limited between the years 343 and 350.

There can, however, I venture to think, be little doubt that the coin with which we are at present concerned belongs to a considerably later date than its prototype. It is, indeed, notorious that the coins of Constantine and his family, being the commonest of the fourth-century issues, continued, especially in Britain, where they were not so abundantly succeeded by the issues of later Emperors, to be current down to the sixth and seventh centuries. It is to imitations of these types, indeed, that we owe our earliest English coinage,⁷ and though the Sceatta series

⁵ *Cod. Theod.*, vol. iv. p. 117. Gothofred rightly corrects Constantius into Constans.

⁶ Cf. Clinton, *Fasti Romani*, ad ann.

⁷ I am glad to see that Mr. C. F. Keary, in his *Catalogue of English Coins*, has renounced his former opinion (*Num. Chron.*, 1879, p. 441) that the wolf and twins type was derived from the rare denarius of Carausius, and in this case, as in that of the "Standard" type, accepts a Constantinian origin.

hardly dates from an earlier period than the seventh century, there are not wanting earlier examples of more or less exact reproductions of fourth-century Roman coins in this country and elsewhere. These Constantinian types formed the basis of a long series of Northern bracteates Scandinavian, Frisian, and Anglo-Saxon, as well as of some sixth-century Merovingian coinages, and a noteworthy example of a revival of the same kind is to be found in the gold solidus, supposed to date from about the year 600,⁸ presenting on the obverse the head and blundered superscription of a coin of Honorius, and on the reverse the well-known type of the Emperor holding the labarum and the globe surmounted by Victory and setting his foot upon a captive, here associated with a Runic inscription. It is a reversion of this sort to an earlier model, but by a Romano-British instead of a half-Romanised Teutonic artist, that makes itself apparent on the present coin. There are peculiarities of fabric which remove it from the barbarous contemporary counterfeits of the coins of Constans and Constantius. Such contemporary imitations present us with blundered copies of the legends on the genuine imperial coins. Here, on the contrary, we have a wholly original style and independent inscription, which, though rustic in its latinity and orthography, has a deliberate meaning of its own, and is thus analogous to the Runic legend on the piece of Teutonic fabric. More than this, as I hope to demonstrate, the letters and their peculiar ligatures, while deviating from fourth-century practice, show a remarkable affinity

⁸ See Dr. Wimmer's remarks in Keary's *Catalogue of English Coins*, p. lxxxiv, *seqq.*

to certain forms that occur on some of the late Roman-Christian monuments of Britain.

That the coin itself was struck in our island may be safely assumed, both from the place where it was found and from the name of Carausius that it bears upon its obverse. Whatever the original extraction of Carausius, there can be no doubt that the name of the first asserter of Britain's maritime dominion struck a deep root in her soil.⁹ A curious manifestation of this is seen in a gravestone found at Penmachno, in Caernarvonshire, recording in barbarous Latin the sepulture of a later and Christian Carausius beneath a cairn. It is headed by the Christian monogram, and the inscription, of which a reproduction is given below, reads, CARAVSIVS HIC IACIT IN HOC CONGERIES LAPIDVM. It belongs to an interesting class of Romano-British monuments dating from the period when the last of the Roman legions had been recalled from our shores, but representing still the continuity of the Roman as distinguished from the more purely Celtic population of Britain. It is included by Dr. Hübner¹⁰ in his "First Period." Here, as in other instances, we have a name of Roman imperial association, and the appearance of the name of Carausius on this stone may be

⁹ Nennius, it is to be observed, gives great prominence to Carausius in his sketch of Roman Britain. He makes him rebuild Severus' wall, "Carautius postea imperator reedificavit (murus) et septem castellis munivit" (*Hist. Brit.*, c. xix.). "Carautius . . . transverberavit omnes regulos Britonum et vindicavit valde Severum ab illis et purpuram Britanniae occupavit" (c. xx.). Professor Rhys informs me that Carausius under the late form of *Ceris* has given his name to a pool in the Menai Straits.

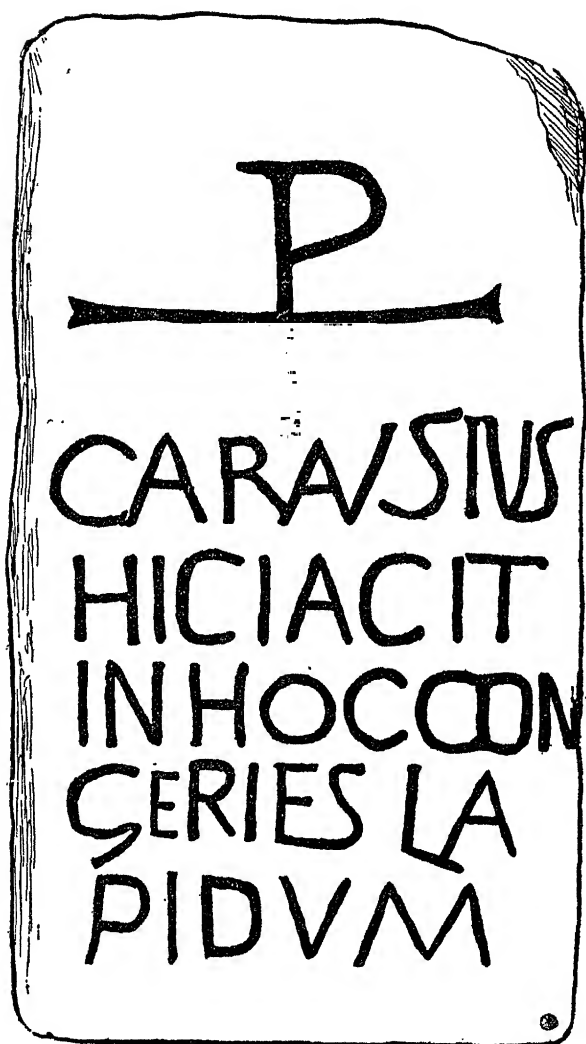
¹⁰ *Inscriptiones Britanniae Christianae*, p. xx. Dr. Hübner places it amongst those written *more Romano* rather than *more Britannico*.

set beside that of Severus, Victorinus, Martinus, the public-spirited Pro-Præfect, who was driven to commit suicide by the Inquisitor of Constantius II., and Victor, the son and associate of Magnus Maximus, all of them Emperors or Governors in a special way connected with Britain, whose names reappear on *tituli* of the same class,¹¹ and seem to indicate a distinct Roman national tradition, as opposed to that more purely British tradition exemplified by names like Boduoc or Conbellinus. The direct connexion with Rome had been cut off, but some part of our soil, at least, remained "Romania."¹²

A comparison of the lettering and arrangement of the inscription on the monument of this Christian Carausius suggests some very remarkable parallels with the style of the legends on the coin of our Carausius Cæsar.

¹¹ Amongst other purely Roman names that appear on these late monuments may be mentioned Vitalis, Vitalianus, Eternus, Eternalis, Severinus, Secundus, Cœlestis (Celexti), Iuvenalis (Ievenalis probably = Juvenalis), Saturninus, Nobilis, Avitus, Justinianus, Viventius, Majorius, Salvianus, Pompeius (Punpeius), and Paulinus.

¹² The passage in Gildas (*De Excidio Britanniae*, c. v.) in which he sums up the effects of Roman rule in Britain in the words, "ita ut non Britannia sed *Romania* insula censeretur," derives peculiar interest from the parallels that it recalls in other parts of the Roman Empire. It was only by the fourth and fifth century that the process of Romanization in the provinces had become sufficiently complete and the contrast with aggressive barbarism sufficiently strong to fully evoke the national feeling, "Quod cuncti gens una sumus," of which the term "Romania" is the territorial expression. Had the English conquest been less thoroughgoing the name might have lived on here beyond the Channel, as it has lived on to this day beyond the Danube. Gildas himself records the preservation of the Roman name by Britain after the separation from the rest of the Empire, though he regrets the loss of Roman customs and laws, "Insula nomen Romanum nec tamen mores legemque tenens quin potius abjiciens" (c. xxvi.).



Sepulchral Slab at Penmachno, Caernarvonshire.
(Reduced to $\frac{1}{2}$ diam.)¹³

¹³ The above copy of the inscription was executed by me from the stone (at present in Penmachno Church), carefully collated since with a paper cast made at the same time. The ligatures are not accurately rendered in *Inscript. Brit. Christ.* 136.

Comparing this with an enlarged fac-simile of the obverse and reverse legend of the present coin—

DOMINO CARAVIOCEZ
DOMIN[O] CONSTANTINO

we note—

1. The same tendency to ligature—that of the VS and ES of the two examples presenting analogies of the most striking kind. Ligatures like the above are wholly absent from the imperial series of the first four centuries of our era. On the other hand, something analogous is occasionally found on coins struck by Gallic cities in the fifth and sixth centuries, and the practice fits in with the monogrammatic tendency of those times. It may be noticed in this connexion that the peculiar G of the monument first appears, so far as I am aware, on the imperial coinage in the reign of Theodosius II., 408—450 A.D.¹⁴ It is adopted in the monogrammatic signature of the Burgundian King Gondebald on coins struck by him in the name of Anastasius, from 491 onwards.¹⁵

2. The S of the inscription, though not reversed as those of the coin, has an almost identical form, consisting of a somewhat angular bend at top and a horizontal prolongation of the lower curve. This form is characteristic of a whole series of Romano-British inscriptions belonging approximately to the same period.

3. The form of the first R in the inscription and of

¹⁴ Sabatier. *Monnaies Byzantines*, Pl. V. 11. The L of the Carausian inscription apparently first occurs on coins of Leo I., 457—474.

¹⁵ See *Annuaire de Numismatique*, vol. i. (1886); Pl. VI., 1—6:

that on the coin approximates to a characteristic **R** of the same series of monuments, itself the precursor of the Saxon **n**. This form occurs on coins of Constantine III.

4. Finally we find the language itself, in both cases, presenting characteristics rather *Romance* than Roman. The IN HOC CONGERIES of the stone belongs to a time when the last letter of the case-ending had been dropped in pronunciation, and when letters were accordingly set on by would-be classical scribes in a purely arbitrary fashion, the spoken language affording them no guide and grammars not being forthcoming. In the case of the coin we have no added letter, but the form points to the Romance style. It is not necessary to suppose that the DOMINO CARAVSIO CES. &c., is to be taken in its literal grammatical sense as a dedicatory form in the dative. From Diocletian's time onwards, at any rate, where such formulæ are used on coins, they are generally accompanied by DIVO, and are literal dedications to the deified departed, as DIVO CONSTANTIO PIO PRINCIPI, on the memorial coins of Constantius Chlorus. Parallels may indeed be found to this dedicatory style on the coins of living sovereigns and without the DIVO, but they are at least unusual, and in the present case it is possible to find a simpler explanation. In other words, this inscription belongs to a time when the nominative case-ending was being generally dropped, and all nouns, save in exceptional instances, were being reduced to a common termination. In this respect it finds numerous analogies in other inscriptions belonging to the same class as the would-be classical *titulus* with which we are dealing. On another monument, also belonging to Dr. Hübner's "First Period," and found at the same place,

Penmachno,¹⁶ "CIVE" and "CONSOBRINO" are used as nominatives. In the same way we find on earlier Roman inscriptions found in Britain forms like "VOTO SOLVIT LIBENS,"¹⁷ and on a later British example, "SINGNO CRVCIS IN ILLAM FINGSI."¹⁸

That the Carausius of the inscription is the same personage as the Carausius Cæsar of the coin, I shall neither affirm nor deny. But there seems nothing to exclude the possibility, or even probability, of such an identification. In both cases we find the name associated with the Christian monogram, though that on the labarum held by the standing Emperor on the reverse of the coin has been much effaced. The coincidences observable in the ligatures and some of the letter forms are, as already shown, of so striking a kind as to point to a close correspondence of date. That no imperial title should appear on the stone does not count for much. A Carausius Cæsar who had reigned at Richborough and commanded on the Saxon Shore, would hardly have found his way to this bleak Caernarvonshire resting-place, beneath the shadow of Snowdon, otherwise than as a fugitive who had already exchanged his purple for a cassock. The practice of erecting inscribed monuments in Britain in the fifth century was not so common as to lead us to suppose that those commemorated were wholly obscure personages.

¹⁶ Hübner, *Insc. Brit. Christianæ*, No. 135. CANTIORI HIC IACIT VENEDOTIS CIVE FVIT CONSOBRINO MAGLI MAGISTRATI. I have carefully examined the stone and find that there is no reason to suppose that CIVES or CONSOBRINOS was the original reading. The inscription seems to be metrical, answering to the rhythm of "Mihi est propositum in taberna mori."

¹⁷ C. I. L. vii. 769. Of the year 258 A.D.

¹⁸ *Insc. Brit. Christ.* 94.

On the contrary, we find in several cases that those thus distinguished were persons of mark—civic and military officers, or at least their kinsmen, while the names as already noticed point in several cases to the existence of family traditions linking their bearers to past Emperors or Governors connected with Britain. The mention of a cairn, "*congeries lapidum*," contained in the inscription itself certainly conveys the impression that the Carausius interred beneath it was not unknown in the annals of the time. The significance of cairns in the Britain of a slightly later date is shown by the legendary account preserved by Nennius,¹⁹ of the cairn—"congestus lapidum"—with a monument at top erected by Arthur in honour of his dog Cabal, and impressed with the footprint of that marvellous hound. So too the traditional monument of Horsa,²⁰ at Horsted, in Kent, which is already mentioned by Bæda (*cir.* 731), was represented in the last century by "a quantity of flint stones."²¹ The usage of the times might provide both the invader and the defender of the Saxon Shore with the same form of monument.

So far indeed as the present argument is concerned, it is not by any means necessary to identify the Carau-

¹⁹ *Hist. c.* lxxix. "Est aliud mirabile in regione quæ dicitur Buelt. Est ibi cumulus lapidum, et unus lapis superpositus super congestum cum vestigio canis in eo. Quando venatus est porcum Troit impressit Cabal, qui erat canis Arturi militis, vestigium in lapide. Et Artur postea congregavit congestum lapidum sub lapide in quo erat vestigium canis sui; et vocatur Carnebal. Et veniunt homines et tollunt lapidem in manibus suis per spatium diei et noctis et in crastino invenitur super congestum suum."

²⁰ *Hist. Eccl.*, I. c. xv. "Horsa postea occisus in bello a Brittonibus, hactenus in orientalibus Cantie partibus monumentum habet suo nomine insigne."

²¹ *Archæologia* II. (1773), p. 110.

sus on our coin with the person of the same name referred to on the sepulchral stone. All that I wish to insist on is, that whether we regard the form of the letters, the abnormal style of the legend and title, or the character of the legend, a striking analogy is observable between the present coin and the class of Romano-British monuments to which the *titulus* belongs. The inference that we are entitled to draw from these resemblances is that, between the coin and the earliest monuments of the class referred to, there is a certain approximation of date. And that a coin, *ex hypothesi* struck in Britain, should present such analogies with contemporary monuments, is rendered the more probable by the parallel supplied by the coins of the earlier Carausius, who reigned in Britain at the end of the third century. As this subject has not received the attention it deserves, I may here refer to a few of the cases I have collected, in which the legends on the coins of Carausius show striking points of contact with the provincial orthography, as traceable on the Roman monuments of Britain. (See pp. 205, 206.)

These and other legends existing on the coins of Carausius minted in Britain, are generally ascribed to the mere haphazard blundering of barbarous engravers. But apart from the fact that many of the most characteristic forms occur on coins that are not otherwise of barbarous fabric, it will be seen, I think, from the above comparative table, that there is a certain method in these mis-spellings. It is possible that, in individual instances, this is due to a certain prevalent fashion in orthography, and to a mere widespread *mode* without rhyme or reason in itself, but characteristic of a certain epoch. But it must in any case be admitted that a large proportion of the forms common to these Romano-British coins and monuments

Coins of Carausius struck in Britain.		Roman Inscriptions found in Britain.	
Elision of I ²²	DINAE AVG (= Dianæ)		{ DO (= Deo) DAE (= Deæ)
"	{ FELICT (= Felicit(as)) PROVDENTIA (= Providentia) Also PROVIDNTIA ²³ VBERTA (= Ubertas)		{ MILIT (= Militis) REGMEN (= Regimen) MARTIMA (= Maritima) DECEMI (= Decimi), &c. CLEMES (= Clemens) CRESCES (= Crescens) CONSTAS (= Constans) LIBES (= Libens), &c. AEQVES (= Eques) HORTAESI (= Hort(e)n(sii) SOCAERE (= Socere) OLYMPAE [= Olympe (Voc)], &c.
Elision of N	ORIES (= Oriens)		{ DEFVNTVS ²⁴ (= Defunctus) OPSEQVENS (= Obsequens) ALE = Alæ. PIE = Pia, &c.
AE for E ²³	{ RAEDVX (Redux) PIAETAS (Pietas)		
C dropped before T	VITORIA (= Victoria)		
P for B	PVPLICA (= Publica)		
E for AE in gen.	ROME (= Romæ)		

²² Cf. BEATA TRANQVILITAS on the Constantinian coins from the London Mint.

²³ For analogous diphthongizing of vowel cf. also CONSTAVNT (= Constantia). So on a coin of Tetricus probably struck in Britain, PAIX AVGG.

²⁴ Cf. VERECVNVS for Verecundus, SCVLTOR for Sculptor.

Coins of Carausius struck in Britain.

{ IXPICITATE VENI (= Expectate)
 IXPICITATA MIL (= Expectatio)
 LITITIA (Letitia or Lætitia)
 MONITA (= Moneta)

I for E or Æ

Roman Inscriptions found in Britain.

{ EQVIS (= eques)
 SVPERSTIS (= Superstes)
 LIGNIA (= Ligneæ)
 CERIALI (= Cereali)
 SIX (= Sex), &c.

S for X

PAS²⁵ (= Pax)

{ ALESAN[DER] (= Alexander)²⁶
 DEXTER (= Dexter)

Final S
omitted.

{ VBERTA } (= Uberitas)
 VBERITA
 { FELICITA (= Felicitas)
 GARAVSIV AVG (= Carausius)

{ MACRINV (= Macrinus)
 VALENTINV (= Valentinus)

C for Q

ECVITAS (= Æquitas)

ECVESTER (= Equester)

In addition to these may be mentioned suggestive forms like VIRTUTE AVG, AG for AVGusti, FIDEM MILITVM, VLTORA AVG, VENERA AVG.

²⁵ This form also occurs on coins of Tetricus struck in Britain.

²⁶ Compare on late Spanish inscriptions "Ausilium," "es" for ex, and apparently Felis for Felix. So on African inscriptions we find Conjux for Conjux, Visit = Vixit, &c. Dr. Hübner suggests that ORDOVS (*Insc. Brit. Christ.* 115) stands for ORDOVIX.

are due to the influence of the provincial dialect, and exhibit undoubted characteristics of incipient Romance pronunciation and Romance grammatical simplification.

As the coins of this earlier and better known Carausius stand to the earlier epigraphic monuments of Roman Britain, so the present coin stands to that later Romano-British series, which represents the survival of the Roman language and traditions in this country at a time when the official ties with what survived of the Empire over sea were already cut away.

The general geographical distribution of this latter class of inscription seems to refer their origin to a period when a large part of South-Eastern Britain was already in Saxon hands. In other words the bulk of them can hardly be earlier than the middle of the fifth century. Many, no doubt, date from the sixth century; one commemorates a certain Paulinus, who has been identified with a bishop who attended a provincial synod shortly before 569.²⁷ On the other hand, seventh-century inscriptions, like the dedication of the Basilica at Jarrow by King Egfrith in 685, show forms of letters which are of a distinctly later character²⁸ than those on the more purely Roman class of monument with which we are dealing.

Admitting, however, that the great majority of these inscriptions range from the middle of the fifth to the end of the sixth or the first half of the seventh century, there is a piece of strong, though hitherto neglected, evidence, which tends to show that some at least belong to a somewhat earlier date. In 1774 a very interesting inscription

²⁷ *Insc. Brit. Christ.*, 82, where Dr. Hübner refers to Rees' *Lives of the Welsh Saints*, p. 188.

²⁸ *Insc. Brit. Christ.*, 198. The late forms of the O, E, and C are specially to be noted.

was found at Ravenhill, near Whitby, which records the building of a *Castrum* by a certain Justinianus, who seems to have borne the title of *Præpositus Militum*. It is written in a character which links it on to other inscriptions of the present class, and shows, for example, much the same form of S as that on our coin, and a peculiar ligature of C and I, which presents a close analogy to that of the CO on the Carausian Monument. Dr. Hübner has included it in his *Inscriptiones Britanniae Christianae*,²⁹ and justly remarks that the form of the letters brings it down to the fifth or sixth century.³⁰ A Roman military officer ordering the construction of a *Castrum* in Britain at so late a date as that indicated by the inscription in question is a striking figure, and we might even expect to find some historic notice of such a personage. And as a matter of fact we do find a reference in Zosimus (and as I venture to think in Olympiodôros also) to a high Roman officer of the name of Justinianus, who held a post in Britain in the early part of the fifth century.

Zosimus, after relating the rapid succession of Marcus, and Gratianus, and the final elevation of Constantine by the Roman soldiery in Britain, whom the progress of the barbarians beyond the Channel and the apathy of Honorius had stirred to the self-defensive choice of a warlike

²⁹ No. 185. According to Dr. Hübner's version it reads IVSTINIANVS P(ræ)P(ositus) VINDICIANVS M(agister) A(R)BITERIV (for Arbitrio ?) PR(æ)positi M(ilitum) ? CASTRVM FECIT A[nn]O . . . For MARBITERIV the possible alternative MAGISTERIV is suggested. Mommsen compares C.I.L. iii. 3870 FL(avius) IOVINVS EX P(ræ) P(osito) MILITVM HISTRICORVM ET FL(avius) PAVLVS BIARCVS PATER ET FILIVS DOMVM A FVNDAMENTIS IVSSERVNT FABRICARI.

³⁰ C.I.L. vii. 268. "Litterarum formæ ad sæculum quintum sextumve ducunt."

Emperor, proceeds to give an account of Constantine III.'s Gallic expedition. He first sent over two of his officers, Justinianus and Nevigastes, whom he placed in command of the Gallic ("Celtic") forces, and then crossed over himself to Boulogne. As Constantine himself was raised to the empire in Britain, and the whole *pronunciamento* was originally confined to the British soldiery, we must suppose that Justinianus and his colleagues had previously enjoyed high commands in the island and were personages whom it was necessary for Constantine to conciliate to his interest. The Yorkshire inscription seems to indicate the whereabouts of Justinian's British command, and if the identification which I have suggested be correct, the date of the inscription recording the construction of the *castrum* must be shortly anterior to 407 A.D., the year of Constantine's elevation. Justinianus was shortly after killed in battle with Stilicho's general Sarus.³¹

Assuming this approximate date to be established, it will be seen that the analogies existing between the lettering and orthography of our coin and these late Romano-British monuments do not necessarily involve a later date for the issue of this remarkable piece than the first part of the fifth century. On the other hand the rapid progress of the Saxon Conquest leaves little place

³¹ Zosimus, lib. vi. Olympiodôros, *Hist. Græc. Minores* (Dindorf), I. 453, gives the same account in slightly different words, but changes the name of Justinianus to Justinus. Zosimus, however, preserves the fuller and presumably the more correct account. He distinguishes Justinianus, who was killed in battle with Sarus in Gaul, from another officer called Justus, who was sent by Constantine with his son and colleague the Emperor Constans into Spain and there excited the rivalry of Gerontius.

for a Roman "Cæsar" in South-eastern Britain during the latter part of that century.

Taking all the facts into consideration it seems to me that the elevation of the Carausius Cæsar of our coin, who from its provenance may be supposed like his greater namesake to have made Rutupiæ a principal stronghold, is not unconnected with the episode of Constantine III.'s Gallic adventure. The title of *Cæsar* itself implies the recognition of an Augustus, and if I am right in reading the reverse legend CONXTA[NTI]NO for CONSTANTINO, there can be little difficulty in recognising the British Constantine as the colleague of our Carausius. The chequered career of Constantine in Gaul makes it highly probable that he found it politic to strengthen his precarious hold on his British provinces by the recognition of a British colleague with the Cæsarean title. On the other hand a new and self-elevated British *tyrannus* whose position was not yet assured, would be likely to imitate, perhaps in a more humble form, the precedent of earlier British usurpers who claimed to be the colleagues of those whom it was their chief object to overthrow. It is thus we find the earlier Carausius striking coins in honour of his imperial "brothers," and adding their titles on his monetary inscriptions,³² while the British Constantine himself successfully laboured to secure his recognition by Honorius.

The crisis in Constantine's British Government came in 409, when his general Gerontius revolted in Spain. Gerontius, himself of British origin, and from whom were apparently drawn some of the legendary features

³² Cf. the inscriptions CARAVSIVS ET FRATRES SVI, PAX AVGGG., MONETA AVGGG., &c.

of the Vortigern in the Hengist story,³³ stirred the Barbarians then in Gaul to a revolt which was followed by a general incursion of their kinsmen from beyond the Rhine into Gaul and Britain. Then it was that the Britons in despair expelled their Imperial Governors and took such effective measures for their own defence as to beat back for the time the barbarian invader. In the earlier moment of the crisis however, and before the thoroughgoing adoption of Home-Rule,³⁴ the authority of Constantine would still have been recognised, and it must have been the last endeavour of his adherents in the island to hold on to the stronghold which was the key to communication with Gaul. Whether we regard this Carausius as an actual nominee of Constantine at this critical juncture, or whether we regard him as an independent usurper who considered it politic to bid for Constantine's recognition in a Cæsarean capacity, we shall not be far wrong, on the hypothesis here adopted, in referring the issue of this unique and highly interesting coin to the year 409. It is perhaps a fair induction that as "the memory of the great Constantine whom the British legions had given to the Church and to the Empire"³⁵ had influenced the British soldiery in choosing the last usurper, so the memory of the brave Carausius, who first raised Britain to a position of maritime supremacy, may have

³³ Rhys, *Celtic Britain*, p. 97 [Ed. ii.].

³⁴ Zosimus's expressions (Lib. vi.) are strong: "τῆς Ρωμαίων ἀρχῆς ἀποστῆναι καὶ καθ' ἑαυτὸν βιοτεῖναι οὐκέτι τοῖς τούτων ἐπακούοντα νόμοις. . . . καὶ ὁ Ἀρμόριχος ἅπας καὶ ἕτεροι Γαλάτων ἐπαρχία Βρεταννὸς μιμησάμεναι κατὰ τὸ ἴσον σφᾶς ἡλευθέρωσαν τρόπον, ἐκβάλλουσαι μὲν τοὺς Ρωμαίους ἀρχοντας, οἰκείον δὲ κατ' ἐξουσίαν πολίτευμα καθιστᾶσαι."

³⁵ See Gibbon c. xxx. Orosius (vii. 40) says that Constantine III. was chosen "propter solam spem nominis."

influenced the choice of this obscure Cæsar at a moment when the Romano-British population was about to assert as it had never done before its independence of Continental Empire.

The association of our Carausius with the British Constantine indicated by the present coin, may at least be taken as evidence that the new Cæsar stood forth as the representative of the interests of the Constantinian dynasty in the island as against the faction of the rebel Gerontius and his barbarian allies. It is not unlikely even that he belonged to the same family as Constantine III. The probability that the later Romano-British princes, Ambrosius Aurelianus, Constantine of Damnonia, Aurelius Conan, and others, traced their descent from the third Constantine has already been shown by Dr. Guest.³⁶ Gildas³⁷ distinctly tells us that Ambrosius Aurelianus (who ruled from about 463 onwards) was of Roman race, and that he was the survivor of a family, members of which had been clothed in the purple, but who had been slain during the troublous period that preceded his reign. Dr. Guest notices the difficulty that no Roman usurper was known to have appeared in Britain after the time of Constantine III. and Constans, and that those Emperors met their deaths in Gaul. Perhaps the elevation of another imperial usurper in Britain itself, of which we have now numismatic evidence, may explain the words

³⁶ "The Early English Settlements in South Britain," in Salisbury volume of *Arch. Inst. Journal*, pp. 49 and 70. (*Origines Celticae* II. 172).

³⁷ *Hist.* c. xxv. "Duce Ambrosio Aureliano qui solus fuit comes fidelis fortis veraxque forte Romanæ gentis, qui tantæ tempestatis collisione, occisis in eadem parentibus purpura nimirum indutis, superfuerat."

of the British historian, and the reference to the violent end of emperors of Ambrosius' family may include a tragedy in which the Carausius Cæsar of our coin played a leading part.

It is possible that after the expulsion of the officials of the Central Government at Arles, a Cæsar of British election may have continued for a while to maintain himself within the walls of Richborough or London. But a variety of historical considerations, a brief statement of which will not be found impertinent to the present inquiry, precludes us from supposing that any one pretending to an imperial title in the island could have long survived the Revolution so forcibly described by Zosimus.

It is probable that during the period that immediately succeeded the overthrow of direct Imperial Government in Britain, at least its South-Eastern parts were administered by the civic officers of the various municipal Commonwealths. Unity of action would be to a certain extent secured by the provincial *Conventus* of the *Civitates*, the tradition of which seems to find expression in the "conventional" election of the "Monarchs of Britain" recorded in the Welsh Triads,³⁸ just as the *Conventus* of the Illyrian *Civitates* is preserved by the *Couvend* of the Albanian clans. The resuscitation of the *Conventus* of Gallic cities at Arles, by Honorius, was a sign of the times; and it is noteworthy that the celebrated meeting of the Britons and Saxons, the legendary scene of Hengist's treachery, is described by Nennius as such a *Conventus*.

The *Conventus* of the *Civitates* was the natural place for electing the military officers who still continued to perform the necessary functions fulfilled by the *Dux*

³⁸ *Triad 34, 3rd Series* (Myvyrian Archaeology II. 63). "Tri Unbenn Dygymuul ynys Prydain," &c.

Britanniarum and *Comes Littoris Saxonici* of late imperial organization. But of any one pretending to the higher imperial titles, whether of Cæsar or Augustus, at this time in Britain there is no question. Constantius, the contemporary authority for the account of St. Germanus' two visits to our island in 429 and 447 or 448, mentions no one higher than a "*Primus regionis*," bearing, it is to be observed, the Græco-Roman name of Elaphius, and a magistrate who exercised the office of "*Tribune*."³⁹ Germanus himself, as "*Dux prælii*" in the "*Alleluia battle*" and the operations that preceded it, assumed a military rank akin to that borne by the typical Roman chieftain in Britain of the last half of the fifth century. Ambrosius Aurelianus appears only as *Dux*, in the Welsh chronicles "*Wledig*" or "*Gwledig*," a title which, as has been suggested by Professor Rhys,⁴⁰ seems to represent the unbroken tradition of the *Dux Britanniarum*. So, too, the Arthur of Nennius, though allied with British kings, is himself spoken of as "*Dux belli*."⁴¹

But the depletion of the urban population of South-Eastern Britain, consequent on the barbarian ravages, Pictish, Hiberno-Scottish, and Saxon, was constantly

³⁹ Constantius, *Vita S. Germani*, i. 24, in *Acta Sanctorum*, ad diem, 31 Julii. "*Vir Tribunitiæ potestatis*." The same phrase occurs in Gregory of Tours (lib. x., c. 21; cf. lib. vii., 23). From Fortunatus (lib. vii. 16) the office of Tribune seems to have been a step towards the dignity of *Comes*. He had charge of the *Castra* and prisons (cf. Ducange, s.v. *Tribunus*, ed. Favre). A Cornish inscription (*Insc. Brit. Christ.* 13) reading . . . BONEMIMORI FILLI TRIBVNI seems to contain a reference to this title; cf. "*CONSOBRINO MAGLI MAGISTRATI*," of No. 125. Both inscriptions belong to Dr. Hübner's "*First Period*."

⁴⁰ *Celtic Britain*, p. 103.

⁴¹ *Hist.* c. lxi. "Artur pugnabat contra . . . Saxones cum regibus Brittonum sed ipse dux erat bellorum."

giving greater prominence to the Celtic element even in that part of the island which during the past four centuries had been most thoroughly Romanized. It was, no doubt, to a great extent the natural outcome of these altered relations, that the title of "Rex" now comes to the fore in British annals. Already in the version of St. Germanus's mission, given by the British hagiographer, Marcus Anachoreta,⁴² and followed with variations by Nennius, we find the Saint repulsed from a royal palace, and himself represented as a king-maker. Gildas, writing of the state of Britain after the embassy, to Aetius, in 445, speaks of a succession of kings.⁴³ His own contemporaries and their predecessors bore the royal title.⁴⁴ The British prince Riothimus, whose aid was successfully sought in 470 A.D. by the Emperor Anthemius against the Visigoths under Euric in Gaul, receives the title of *Rex Britonum* from his only chronicler Jordanes.⁴⁵

But this growing prevalence of the regal title in Britain

⁴² *Acta Sanctorum*, loc. cit., p. 272, Nennius, c. xxxi. Marcus appears to have flourished in the eighth century. He was a Briton by birth, educated in Ireland, and after having been for many years a bishop in his native country, was enticed to France by Charles the Great's munificence, and received as an Anchorite at St. Medard's Monastery.

⁴³ *De excidio Britannia*, c. xix. "Ungebantur Reges et non per Deum, sed qui cæteris crudeliores extarent, et paulo post ab unctoribus, non pro veri examinatione, trucidabantur, aliis electis truciorebus."

⁴⁴ *Epistola Gildæ*. "Reges habet Britannia sed tyrannos." Vortipor is addressed as "boni regis nequam fili." Maglocunnus has the regal title, and he had in early youth slain the king, his uncle. ("Nonne in primis adolescentiæ tuæ annis avunculum regem . . . oppressisti?") Maglocunnus (Maelgwn) himself died, according to the *Annales Cambriæ*, in 547.

⁴⁵ Jordanes, *de Getarum sive Gothorum origine*. Ed. Closs. p. 160. The defeat of these "Brittani" at Bourges is mentioned by Gregory of Tours (*Lib. II. c. 19*), but he does not notice their transmarine origin.

must not by any means be taken to indicate the abrogation of all Roman traditions. The title of Rex itself was no doubt recommended by its claims to barbarian allegiance, but if we consider the changed usage of the times in other provinces besides Britain, it will be seen that by the fifth and sixth century it had been frankly adopted by Roman rulers in their relation with Roman populations. The title of Rex had, indeed, already Imperial associations, as we know from the instance of Constantine's nephew Hanniballianus, who was not only allowed, in virtue of his oriental government, to assume this style, but to add it to his name on the coinage of the Republic. In the fifth century we find the Gallo-Roman population of Northern Gaul, isolated from the rest of the Empire by the Frankish conquests, obeying a prince of the name of Syagrius, with the remarkable title of *Rex Romanorum*.⁴⁶ The Patrician who thus stood forth as the champion of his nationality in this Gallic "Romania," ruled over barbarians as well as men of Roman blood, and his full title seems to have been REX FRANCORVM ET ROMANORVM. In Africa, too, after the Vandal conquest a curious parallel occurs. From a Mauretanian inscription it appears that a remnant of the Roman population in close confederation with the Moors prolonged awhile their independence of the Teutonic invader under the headship of a prince Masuna, who here receives the title of REX GENTIVM MAVRORVM ET ROMANORVM.⁴⁷ Obvious parallels may be supplied from the Italy of Odoacer and Theodoric as well as the Illyrian regions,

⁴⁶ *Greg. Tur. Lib. II. c. 27.* It is probable that his father Ægidius, who also reigned at Soissons, had the same title.

⁴⁷ *C. I. L. viii. 9835.* The inscription is of the year 508 and begins: PRO . SALVTE . ET INCOL(umitate) . REG(is) . MASVNAE . GENT(ium) MAVR(orum) ET ROMANOR(um).

and in Britain, where the Celtic element now claimed for itself political parity, there is every reason to believe that a dual title of the same kind was adopted by Riothimus and his predecessors, who were no doubt *Reges Romanorum et Britonum*, or even, it may be, *Saxonum* as well. It is characteristic of the times that Gildas, in his review of Roman history, speaks of "*Reges Romanorum*" afterwards obtaining the "*Imperium*" of the World,⁴⁸ an expression curiously prophetic of the usage of the Holy Roman Empire.

A "*Rex Romanorum*" then was no longer an anomaly. The *Rex* himself had become an imperial official, who often united to the regal title the dignities of the Patriciate or the Ducatus. As a title it afforded a convenient bridge to unite the fealty of Roman and barbarian. But the very fact that such a title obtained a currency among the isolated patches of Romanic population that in Gaul, Africa, or Britain, still raised their heads above the barbarian flood, is a witness to their despair of setting up pretenders to higher imperial rank. The time had gone by when a Maximus could go forth from his British home to Rome or Trier, or a Carausius could even secure his sway over so much of the Roman world as was contained within the isle of Britain. There was no place in these contracted dominions for a Cæsar or Augustus, and though the name of Imperator has survived in Welsh, and has even attached itself to Arthur in Welsh saga, there is no allusion in any of our early authorities to its adoption by a Romano-British king.⁴⁹

⁴⁸ *De Excid. Brit.*, c. iii. "*Romanorum Reges cum orbis Imperium obtinuisse*," &c. There is a variant reading, "*Romani Reges*."

⁴⁹ The Gwledigs, or Over-Kings, were sometimes called

In short, all historic probability seems strongly to weigh against the existence of any prince in Britain calling himself Caesar and Dominus during the period which intervened between the overthrow of the direct Imperial Government in Britain in 409 and the final conquest of the South-Eastern part of the island by the English invaders. The titular authority of the Roman Emperors no doubt continued, and they may even have gained in sentimental veneration from the loss of effectual control. But the Emperors whose titular authority was acknowledged lived far away at Rome, or even Constantinople. Honorius, by his letters to the Cities of Britain, was careful to legalise the new state of things, and the very instrument that abrogated the direct government of his officials still asserted his dominion. The Embassy of the Britons to the Consul Aetius implied the recognition of his titular sovereign the Emperor Valentinian III. The mission of St. Germanus was itself a rehabilitation of the spiritual sway of Rome as against the incursions of Celtic heterodoxy, and the Synod of Verulamium was, from every point of view, a re-cementing of the ties that still bound Britain to the *Respublica Romana*. And that those ties were not so purely sentimental as we might be prone to imagine, is shown by the readiness with which the British Riothimus answered the call of the Emperor Anthemius, and crossed the Channel at the head of his forces in the capacity of Imperial commander against the Goths. The loyalty of the Roman element in Britain to the Empire at a still later date is strikingly attested by the words of Gildas,⁵⁰ who, when describing the career of

Kessarogion, i.e. Cæsarians, by the bards (Rhÿs, *Celtic Britain*, Ed. ii., p. 135), in virtue of their *Ducatus*.

⁵⁰ *De Excidio Britannia*, c. x.

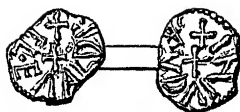
the British Emperor Magnus Maximus, cannot refrain, two centuries after the event, from an indignant outburst against the usurper who had wickedly presumed to raise his hands against "his Lords the two legitimate Emperors." It would be interesting to know how far the writer's presumable loyalty to the Emperor Justinian might have stood the shock of learning that his great commander Belisarius had offered Britain to the Goths in exchange for Sicily. This proposal, recorded by Procopius,⁵¹ is at least of interest, as showing that if Britain still recognised the titular sovereignty of the Augustus, he on his side still affected to consider it a subject Diocese.

But this very recognition of imperial over-lordship, shadowy as it had become, precluded the existence of imperial pretenders in Britain itself. The reappearance of the highest imperial titles in our own island was rather the work of the later Anglo-Saxon kings, and was the insular reply to the revival of the Western Empire by Charlemain on the Continent. The usual imperial title of Æthelstan and his successors was "Basileus" or "Imperator," and it was reserved for Eadred, as "Cyning and Cásere,"⁵² to translate into an English form that Cæsarean style of which the coin of the second Carausius before us must be taken to supply the latest memorial in Roman Britain.

ARTHUR J. EVANS.

⁵¹ *De bello Vandalico*, lib. ii.

⁵² *Cod. Dipl.*, ii. 303. Mr. Freeman remarks on this (*Norman Conquest*, l. 558) that this diploma is remarkable as "the only one on which the title of Cæsar appears in any shape. Casere is the regular English description of the Continental Emperors, but I know of no other instance of its application to an English King."



IX.

COINAGE OF ELFWALD II., A.D. 806—807.

NOTWITHSTANDING Mr. Keary's assertion that no coins are known of this king,¹ I venture, with much deference, to hold an opposite opinion.

In my cabinet is the brass styca above engraved (which was found at York in 1842, amongst ten thousand stycas bearing the names of other personages), and for the following reasons I appropriate it to the reign of Elfwald II. :—

1. No stycas before Eardulf's reign have a moneyer's name upon them.

2. The moneyer's name upon it is EADVINI, and EADVINI was a moneyer of Elfwald II.'s predecessor and successor respectively.

3. The letter R. (EX) follows the king's name, as on the styca of Eanred, Ethelred, &c.

The late Mr. Lindsay had a styca² (now lost) with the

¹ *A Catalogue of English Coins in the British Museum*, 1887, p. 143.

² *Coins of the Heptarchy*, Pl. I., No. 31.

same legend as mine, although the arrangement of the letters was slightly different; and I think, had these two stycas been issued during the reign of the first Elfwald, a rude animal, or some grotesque ornament, would not im- probably have occupied the reverses in lieu of a moneyer's name.

I do not see any necessity for assigning any stycas to Elfwald I., or any sceattas to Elfwald II., until more cogent evidence presents itself.

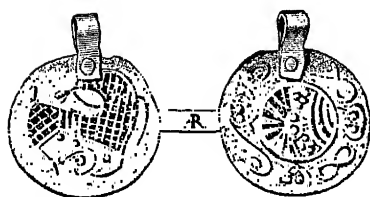
NATHAN HEYWOOD.

X.

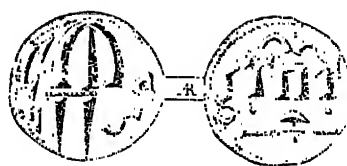
DR. HILDEBRAND ON THE EARLIEST SCANDINAVIAN COINAGE.

DR. HANS HILDEBRAND, the well-known antiquary and keeper of the Antiquarian Museum in Stockholm, has recently published, in the Journal of the Royal Historical and Antiquarian Academy, a paper on the earliest Scandinavian money (*Nordens äldsta mynt*), which will, I think, be of considerable interest for the readers of the *Numismatic Chronicle*. I will therefore give a short abstract of that paper, which, through the kindness of Dr. Hildebrand in procuring *clichés* of his illustrations for the use of the *Numismatic Chronicle*, we shall be able the better to explain by illustrations. Some points not touched upon in the article Dr. Hildebrand has added in a private letter to the present writer.

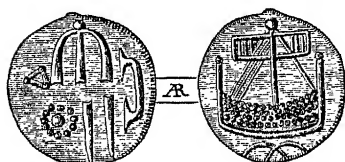
I. Dr. Hildebrand's paper is, in effect, divided into two parts. In the first he discusses the attribution of certain coins hitherto generally considered as the earliest money actually struck in Scandinavia. These pieces are all published in the first page of Schive's important *Norges mynter i middelalderen*, and Dr. Hildebrand makes some corrections to Schive's attributions. In the second part he publishes a number of pieces which have lately been discovered at Björkö, in Sweden. In this short *résumé*, I propose to reverse the order of treatment, to speak first of the Björkö



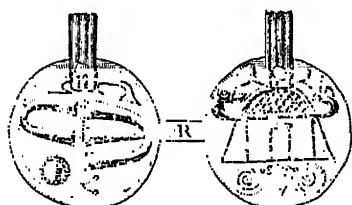
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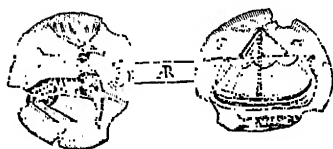
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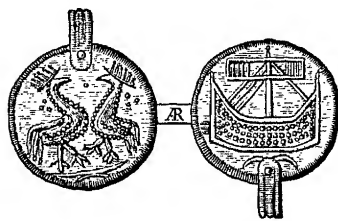
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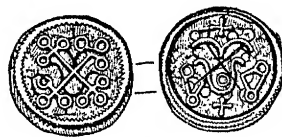
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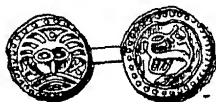
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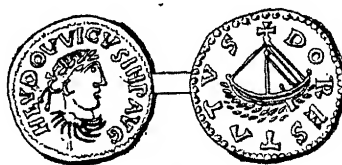
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c

pieces, which I think Dr. Hildebrand conclusively shows are earlier than the coins published by Schive, and to turn to these last when we have dismissed the Björkö coins.

Björkö is an island in Lake Mälär, a little to the east of the mouth of the Gripsholmsvik in that lake, and it is now generally accepted as identical with the ancient Birca. The ancient and the modern names are the same in meaning, both signifying "birch-island;" and the discovery of numerous antiquarian remains in Björkö has further tended to its identification. The localisation of Birca upon the Upsala branch of Lake Mälär, though it appears in Von Spruner's Atlas, must be abandoned. Birca was the first place at which the first missionary to Sweden, St. Anscar, made any stay. It will be remembered by those who have read the life of this saint how, on his first voyage to Sweden, the vessel which bore Anscar and his brother missionary Witmar was attacked by pirates (Vikings), and how they and the crew only saved themselves by leaping overboard and swimming to the shore. Thence the missionaries wandered across country on foot until (apparently) they came to Lake Mälär and to the harbour of Björkö, where King Björn received them favourably, and they were allowed to build a church on Björkö, the first Christian church erected in Sweden. This was in A.D. 830—1. Some ten years later the Swedes rose against the missionaries, and Anscar's successor, Gauzbert, the bishop of the church in Sweden,¹ was driven from the country. For seven years Birca remained without any Christian missionary, until Anscar dispatched Andgar to continue the work of his predecessor. This work, how-

¹ There were now two Christian churches, one at Birca, another at Sigtuna, the capital of Björn's kingdom.

ever, made little progress until, about 850, Anscar himself made a second journey to Sweden. After an assembly held at Birca, leave to preach and minister in this kingdom was accorded to the Christians, and Anscar returned [c. 854] to his archbishopric of Bremen, leaving his nephew, Erimbert, as Christian priest in Björkö.

The accompanying coins, Nos. 1—6,² represent the different types of the coins which have been found during excavations at Björkö by Dr. Stolpe, and which are published by Dr. Hildebrand. At the same place English coins have been found, dating from the earlier years of the tenth century, *e.g.* Edward the Elder (d. 924), and Sihtric of Northumbria (d. 926 or 927). But the series of pieces here given are certainly not derived from any English coins of this class. They are derived, as Dr. Hildebrand very clearly shows, from the coinage of Dorstat (Duurstede), chiefly that of the time of Charles the Great and Louis the Pious [compare Nos. 2, 3, and Figs. *b* and *c* rev., taken from Van der Chijs, *Munten der Frankish-en Duitsch Nederlandsche Vorsten.*] No. 1, which is No. 11 on Dr. Hildebrand's plates, I will leave on one side for the present. No. 2 has the remains of the inscription CAROLVS on the obverse and DORSTAT on the reverse. Nos. 3 and 4 retain the traces of CAROLVS. Nos. 3, 5, 6 have all on one side a ship, which is a type peculiar to Dorstat and to Quentovic among all the Carolingian coinage. Nos. 4—6 have apparently original types upon

² I have slightly altered the order in which these coins are engraved by Dr. Hildebrand for reasons which will immediately appear. My No. 1 in his plate follows No. 6. The order of the others is the same. Nos. 7, 8 are coins of the same class found elsewhere than on Björkö.

one side. It is possible, indeed, in the case of the first of the three, that its reverse type is a somewhat remote derivative from the well-known "temple" type of Charlemagne and Louis the Pious [compare Van der Chijs, *o. c.*, Pl. XI. 1, for a type, which may have been instrumental in forming the type of our No. 4]. I cannot point out any undoubted prototype of the stag on No. 5 nor of the two cocks on No. 6.

Dr. Hildebrand next connects with the stag-type a number of others slightly varying among themselves, of which Fig. 1 is the representative. But it must be pointed out that there is considerable difference between the stag on No. 5 and the animal on No. 1. What the type of No. 1 seems to me to be derived from is a sceatt-type, of which numerous examples have been found in the Netherlands, and some at Dorstat itself (Fig. *a*). The type is engraved in Dirk's *Les Anglo-Saxons et leurs Sceattas*, and is called by M. Dirk "type Wodan-monstre." Of course it has nothing to do with Wodin, but is in its turn derived from a Merovingian type with the head of Christ (see my *Cat. Eng. Coins*, vol. i., p. 16, and Pl. III., 14—18, and *Morphol. of Coins*, N. C. 3 S., vol. 6 (1886), p. 50). The type of the sceatt or Low-Country denarius is on both sides the prototype of the Björkö piece, as may be seen on comparing No. 1³ with Fig. *a*, or with the *Cat. Eng. Coins*, Pl. III., No. 18, or with Dirk's Pl. D, No. 25—30 (No. 29 is a good example), or E, d. This last piece has the further interest of having been actually found at Duurstede (Dorstat). Or, again, we may take Van der Chijs *o. c.*, Pl. IV., No. 29—31.

Thus we have in this Björkö find a series of pieces

³ The reverse must be turned through 45° to the r.

copied from coins current at Dorstat, but of coins of somewhat different periods. The sceatt coins probably belong to the seventh or the first half of the eighth century, whereas the Carlovingian coins belong to the very end of the eighth century or the beginning of the ninth. Nevertheless, the earlier coins may have continued in circulation concurrently with the later ones.

Every student of the history of Western Europe in the ninth century will have noticed the important place occupied by the town of Dorstat as a centre of commerce. Some passages in the life of Anscar especially point to the relationship between this town and the north, as, for example, c. 20, where the pious woman Frideburg, on her deathbed, gives direction to her daughter Catta to take her wealth and (because there are no poor in Birca) go with it to Dorstat.⁴ And the city is described in terms which do not, perhaps, sound in modern ears so laudatory as they would to readers in that age: "Ibi sunt ecclesiæ plurimæ, et sacerdotes et clerici, ibi indigentium multitudo." In another passage (c. 24), we read of the Christians who came from Dorstat and Hamburg to Schleswick where the first church had been built in Denmark. Hamburg remained from that time to this a great sea-port and emporium, but Dorstat seems to have been ruined by the frequent Viking raids from which it suffered during the ninth century. We hear little of it after the middle of the ninth century.

The inference, I think, is that the Björkö pieces were originally *copied* from Dorstat coins, which could very well have been in circulation during the first portion of the ninth century, but could hardly have been so at a much

⁴ Compare also c. 27. (Pertz II. 712.)

later date. It seems, in fact, not too much to believe that they were actually carried over at the time of St. Anscar's mission in A.D. 829.

This, of course, does not imply that the Björkö pieces themselves were made at such an early period. It only implies that the earliest coins from which their types were derived could not have arrived in the country later than about A.D. 829.

We have one more point to notice in the morphological history of these pieces. In the *Zeitschrift für Numismatik*, 1877, Taf. iii., are engraved a number of coins from a find at Lübeck (described by Hr. Dannenberg), in which will be seen a coin with on the obv. one of the types of Cnut (Hildebrand, type G); on the reverse a stag, similar to the stag on the obv. of our Fig. 5. The question then arises whether the Björkö pieces can belong to a date as late as the time of Cnut. On this point I will quote verbatim the observations of Dr. Hildebrand.⁵

"It would seem at first quite correct to attribute the coins which I have described [the Björkö coins] to the epoch of King Canute. But I find that quite impossible. That all the coins figured by me must be regarded as a group seems quite clear to me, on account of the transition which can be established between the different types. It is not a continued development, but the transition lies in the combination of the types. That the oldest specimens are connected with the coinage of Dorestad I must regard as evident.

"It is quite natural to ask, 'Cannot the different types be attributed to different parts of a somewhat lengthened period? Cannot the youngest types be attributed to the

⁵ In a letter to the present writer.

epoch of King Canute?' To the first question I answer without any hesitation, 'Yes;' to the latter, 'No.'

"All the coins figured by me are found on the isle of Björkö, in the lake of Mälär, in tombs or in the refuse-heaps of the city, which must have existed there in old times. We very seldom find by the side of a village of central Sweden more than about one hundred tombs. Even at this day more than two thousand tombs exist upon the island of Björkö. Its name, 'Birch-island,' identifies it with the Birca of Rimbertus (*Vita Ansgarii*) and of Adamus Bremensis. It was to the city of Björkö that St. Anscar and his followers went. There Christianity was first effectively preached in Sweden, and St. Anscar was sent by Louis le Debonnaire.

"The city was destroyed—but when? Unhappily, our chronicles do not give us the exact date. We have to look for it in studying the archæological and the numismatic evidence of the finds, not only the accidental ones, but also those which result from systematic diggings.

"Arabic coins are found in the tombs and the refuse-heaps of the island. Some Carlovingian coins are found, as well as English coins of Edward I. [Eadweard the Elder], as well as [Guthorm] Æthelstan of Northumbria [East Anglia], and coins of York with the name of St. Peter. But *not a single coin has been found* there belonging to the Anglo-Saxon kings of our period of Anglo-Saxon treasure-troves; not a single German coin occurs in the same finds. As the city of Björkö was, for the time and the country, very considerable, the later Anglo-Saxon coins and their German contemporaries *must* have found their way thither at the time when they were brought in such great numbers to Sweden, if the city had

existed at this time. But as no coin of Eadgar, of Æthelred II., of Canute, nor of his successors has been found at Björkö, it seems to me possible to draw but one conclusion: that the city of Björkö had been already destroyed at this time, when the great influx of Anglo-Saxon and German coins commenced. Therefore it is impossible to ascribe any of these Björkö coins to the epoch of King Canute the Great. All of them must belong to a period before A.D. 1000.

“But some of these coins have been preserved, and from such a coin some mint-master [moneyer] of Canute has copied his reverse.”

II. The other part of Dr. Hildebrand's paper (the first in his order) is connected with what may fairly be called the beginnings of a native Scandinavian coinage. The pieces with which it deals are the coins (Nos. 5—15) of Tab. I. of Schive's *Norges Mynter i Middelalderen*. Schive rightly attributes his Nos. 1—4 to Eric Blóðöx, son of Harold Haarfagr. But as these coins were struck in England, they are in no sense a beginning of the native Scandinavian coinage. Those which follow Schive attributes as follows:—

No. 5, Olaf Tryggvesson (Norway), 995—1000.

Nos. 6, 8, Jarl Erik Hakonssön (Norway), 1000—1015.

No. 9, 10, Olaf Skötkonung (Sweden), 1000—1015 in Norway.

Nos. 11, 12, Svend Tvæskegg (Denmark), 1000—1014.

Nos. 13, 14, Hakon Erikssön (Norway), 1015.

Nos. 15—20, Olaf the Saint (Norway), 1015—1028 + 1030.

All the coins 5—14 are copied from the same type of Æthelred II. (Hildebrand, Type C), and therefore there is nothing in the types of the earliest Scandinavian coins to

show the priority of one over another. No. 15 is derived from Æthelred II., Type D. No. 20 copies a rare type (G) of Æthelred. The rest are all derived from types of Cnut. Concerning the attributions of coins 15—20, there can, in fact, be little dispute. But Schive's attribution of 5—14 is by no means above question. One of the latest writers upon this subject, Prof. K. Ersler, of Copenhagen, comes to the conclusion that the earliest Scandinavian coins are those of Svend Tvaeskegg and Olaf Tryggvesson; later come those struck by Olaf Skötkonung. Svend was in England more or less constantly in Viking expeditions between 982—988. In 994 he and Olaf Tryggvesson, in conjunction, made another Viking raid here; they fell upon London, and harried a large part of the surrounding country. The English paid a heavy Dane-geld, Olaf left this country to obtain the crown of Norway, and Svend left England in peace for the moment. Svend was, however, again in England in 1003—1004, and again in 1013. On the last occasion he was acknowledged as king, but left the country 1014. His son Cnut was, as we know, acknowledged on the death of Æthelred in 1016.

Now as the coin attributed to Svend in the above series and that attributed to Olaf both have the same moneyer's name, *Godwine*, on the reverse, it has been natural to suppose that the coins were made at this time, or were made in Scandinavia by a moneyer whom they carried away with them in 994.

Olaf Skötkonung may have taken the type of his coin from Svend, who was his step-father. Svend married Olaf Skötkonung's mother in A.D. 999.

There would not be much difficulty in these attributions were there any continuous Norwegian series of coins from Olaf Tryggvesson downwards. Schive, indeed, does give

such a continuous series, ascribing coins to Jarl Erik Hakonssön (1000—1015) and to Hakon Erikssön (1015), after which we come to St. Olaf, about whose having struck coins there can be no question. But Dr. Hildebrand shows, I think conclusively, that the coins ascribed by Schive to Erik could not really have been struck by him. One of these coins (the last) has unintelligible letters. The Stockholm Cabinet has two examples similar to Schive's, with intelligible legend; one showing the end of an inscription . . . A REX ZVENO [Olaf] a rex Svenovum. This shows that all these coins were not struck by Erik but by Olaf Skötkonung. The other two coins engraved by Schive and attributed to Erik, read on the obverse HENRICVS COM[es], and on the reverse HROSA ME FEC[it]. Comes might very well stand for Jarl, but it is impossible that an English or a Scandinavian moneyer should have written Henricus for Erik. Moreover, Hrosae, the name of the moneyer, is not either an English or a Scandinavian name (of this date), though it is a German one.⁶ In fact, there can be little doubt that the coin in question was struck for some German Count Henry of the eleventh century. Dr. Hildebrand admits the attribution of Schive's coins to Hakon Erikssön (1015), as, of course, those to St. Olaf, whose reign also began in 1015.

This leaves such a large gap after the death of Olaf Tryggvesson before the earliest known Norwegian coin that it becomes doubtful, or more than doubtful, whether the attribution of coins to Olaf Tryggvesson can be sustained; and in fact Dr. Hildebrand attributes the coin we have been discussing to St. Olaf.

⁶ Dr. Hildebrand refers to Förstemann's *Alt deutsche Namenbuch*.

In the same way, as there is no intermediate coinage between the one coin of Svend and the beginning of a regular Danish coinage under Cnut, it is natural to attribute the former piece to the very end of Svend's reign, *i.e.* to a time just after the last visit to England in 1013—1014.

We then have to correct Schive's list of the issuers of the earliest native Scandinavian coins to the following:—

- Sweden.* Olaf Skötkonung, 1000—1015 (in Norway). Nos. 9, 10, of Schive.
Norway. Hakon Erikssön, 1015. Nos. 13, 14, of Schive. St. Olaf, 1015—1038 + 1030. Nos. 5, 15, 20, of Schive.
Denmark. Svend Tvseskegg, 1000—1014. Nos. 11, 12, of Schive.

The weight system of these coins is not uniform, that of Olaf Skötkonung following the Swedish, and not the English system. Earl Hakon's coin does the same, and therefore appears to be influenced by the coin of Olaf Skötkonung, who ruled in Norway between A.D. 1000 and 1015. The relationship between Svend and Olaf the Swede dates from the marriage of the former to Olaf's mother in A.D. 999; and (it seems to me) that either may have copied his coin from the other—though the money of neither (we may assume) dates before about A.D. 1013—1014. St. Olaf must have copied his coin with the name of Godwine from the similar coin of Svend.

These, then, are the results of Dr. Hildebrand's paper. It may be interesting, in connection with them, to give a glance at the early history of Scandinavian money in Europe, so far as it can now be reconstructed. I have already said, in the first volume of the *Catalogue of English*

Coins,⁷ that the remarkable Cuerdale find seems on one hand to represent the earliest Scandinavian coinage. We know the coins of this find to have been most of them struck before the end of the ninth century, and from their peculiar types—half English and half Frankish—they seem to deserve, more than any other, the name of Viking coinage; for the most important half of the Viking period—what might indeed be called, *par excellence*, the “Viking Age”—lies chiefly in the ninth century and in the earliest years of the tenth. Many of the names of moneyers of the Cuerdale coins are of Frankish form, and others may be Danish. This series includes the coins of the earliest Dano-Northumbrian kings (Guðfred) Cnut and Siefred, coins which have a character of their own, quite distinct from that either of the contemporary English kings or the later Danish or Norse kings of Northumbria.

We have, on the other hand, the Björkö coins, which have been discussed above, *if we admit that they did pass current as coins*. I am myself by no means prepared either to admit, or categorically deny this. We have seen that the originals from which these types were copied were probably carried to Sweden in the first half of the ninth century; the copies themselves might belong to the same time, but more probably to fifty years or even a hundred years later—they *must* have been made before A.D. 1000, as Dr. Hildebrand has shown. But, on the other hand, the type of some of them was still known as late as the time of Cnut, so that it seems reasonable to suppose that they were not made so *very* long before Cnut's days. This would suggest that they were made about the middle of the tenth century.

⁷ P. 20.

After what we may call the Viking coinage in our country we have the regular series of coins struck by the Danish or Norse Kings of Northumbria, who copied types of contemporary English kings in the south. These form, as we have said, a series perfectly distinct from the coins of (Guðred) Cnut and Siefred, which constitute the greater part of the Cuerdale find, and show incidentally how the Dano-Norse kingdom had become assimilated to the rest of England, and how distinct it really was from the contemporary Norse kingdoms in Ireland.

Then we have the various series of coins imitated from the coins of Æthelred II. The Scandinavian varieties of these have been just described and discussed; but we may add to them the coinage of the earliest Norse kings of Ireland. This series, as Dr. Aquilla Smith has shown, begins with the coinage of Sihtric III., who copies precisely the same C-type of Æthelred which was universally copied on the Scandinavian money.

We may finally, as the outcome of all this discussion, range the earliest Scandinavian coins, or the earliest struck by any Scandinavian ruler, in the following classes:—

1. Transitional coinages—

- a. Imitations of coins which had been carried to the north (*e.g.* the imitation of the Dorstat coins described by Dr. Hildebrand?).
- b. Viking coinage represented *e.g.* by Cuerdale Find, which includes barbarous imitations of English pennies.
- c. New series such as the “St. Edmund” series, struck south of the Humber.
- d. Coins of Cnut and Siefred in Northumbria.
(As explained *Cat. Eng. Coins*, vol. i., pp. 201—2, though these coins bear the names of Cnut and Siefred there is no necessity to suppose them to have been issued under the authority of these kings.)

2. Later Dano-Norse coinage in Northumbria, which is assimilated to the contemporary coinage of the South-Humbrian English kings.

3. The earliest coins certainly^s struck by Scandinavian people elsewhere than in England. All these began by imitations of Æthelred II., Type C, which were struck in the following places by the following kings:—

- a. Ireland.* Sihtric III.
- β. Denmark.* Sven Tvaeskægg.
- γ. Sweden.* Olaf Stötkonung.
- δ. Norway* { Hakon Jar.
Olaf Helge. }

C. F. KEARY.

^s The Björkö pieces being very probably ornaments and not coins,

XI.

ON SOME PECULIAR MEDIÆVAL MILANESE TYPES.

THESE types originated about the middle of the thirteenth century, the early mediæval coinage of Milan, as elsewhere, having little variety, and being comparatively uninteresting; the denaro (or grosso) was almost the only coin, and its type was generally a rude portrait, a cross, or a monogram, with the name of the city for which it was struck. Gradually, more distinctive types were introduced, the earliest being representations of patron saints. Thus Venice adopted St. Mark; Florence, SS. Cosmus and Damian or St. John; Lucca, the Sanctus Vultus; Arezzo, St. Donatus; Rimini, St. Gaudentius; Rome, St. Peter; and Milan, SS. Gervasius and Protasius (its protomartyrs), who were beheaded there in the first century, and the great St. Ambrose, its bishop during the latter part of the fourth century. These first appear on a gold coin struck during the republic 1250—1310; its obverse has the protomartyrs standing together, with their names in the margin, and in the middle, vertically, MEDIO-LANVM; its reverse has St. Ambrose standing within a trefoil-headed niche, his right hand raised in the act of benediction, with the legend S. AMBROSIVS.

Pl. VIII. Fig. 1 is a grosso of Henry VII. of Germany, with the type of St. Ambrose seated, his right hand raised in the act of benediction; the obverse has the legend HENRICVS REX.

Fig. 2 is also a grosso of the same sovereign; its obverse has the standing figures of the protomartyrs, with their names in the margin, and between them vertically the legend HNRIC IPAT¹ (Imperator); the reverse has St. Ambrose seated, as on Fig. 1.

It is interesting to be able to determine from the titles on these coins the years in which they were struck, for Henry VII., who was elected King of the Romans in 1308, and crowned at Aix-la-Chapelle in 1309, invaded Lombardy the following year, and was again crowned as king at Milan in 1311; in 1312 he was crowned as emperor at Rome, and he died in August, 1313. Therefore, No. 1, with the regal title, must have been struck during the latter part of 1311 or early in 1312, and No. 2, with the imperial title, between his coronation in 1312 and his death in August, 1313.

After the middle of the fourteenth century the type of SS. Gervasius and Protasius was discontinued, and that of St. Ambrose varied. On Fig. 3, struck by Galeazzo II. and Barnabo Visconti, 1354—1378, the bishop is still shown seated, with his right hand raised as on Fig. 2, but instead of blessing he brandishes a sort of triple-thonged whip.

¹ The following are some of the abbreviations of "Imperator" met with on mediæval coins:—

Rome	{	IPA. Charlemagne, before 816, with Pope Leo III.
	{	IPAR. Carloman, before 884, with Pope Marino I.
	{	IP. Berengarius, before 924.
Milan	{	IPRT. { Frederic I., before 1186.
		{ Henry VII., before 1313.
	{	IPAT. Henry VII., before 1313.
	{	IPT. Louis of Bavaria, before 1329.
Servia	{	IPA. Imperator .
	{	IPAT. Imperatrix } Stephen VII. and Elena, before 1356.

Fig. 4, struck by Galeazzo Maria Sforza, 1466—1476, shows another variation, the bishop being in a standing position and using his whip on a retreating figure. The most remarkable type, however, is that of Fig. 5, which was struck during the same reign as Fig. 4; the bishop is here represented on horseback, attacking with his whip some soldiers, one of whom has fallen under the horse's feet. The same incident is shown in Fig. 6, taken from a sixteenth-century panel painting in my possession and attributed to Giovenone of Vercelli.

As regards the meaning of the whip in the hand of St. Ambrose, I suggested in a former paper² that it might have reference to Christ's driving the money-changers out of the Temple; the same idea appears to have occurred to M. Cahier,³ where he says, "C'était une sorte de pendant à notre Seigneur chassant les vendeurs du Temple."

Speaking on the same subject Mrs. Jameson⁴ says, "A more frequent attribute [of St. Ambrose] is the knotted scourge with three thongs. The scourge is a received emblem of the castigation of sin; in the hand of St. Ambrose it may signify the penance inflicted on the Emperor Theodosius; or, as others interpret it, the expulsion of the Arians from Italy and the triumph of the Trinitarians. It has always this meaning, we may presume, when the scourge has three knots." Mrs. Jameson continues:—"I remember (in the Frari at Venice) a picture in which St. Ambrose, in his episcopal robes, is mounted on a white charger, and flourishing on high his triple scourge. The Arians are trampled under his feet or fly before him."

² On type of front-faced seated figure. *Nun. Chron.* 3rd series, vol. iv. p. 257.

³ *Caractéristiques des Saints dans l'Art Populaire*, vol. ii. p. 429.

⁴ *Sacred and Legendary Art*, vol. i. p. 395.

Professor Biondelli⁵ describes the foregoing various types, and says that there are two opinions as to their meaning; the one that they allude to the contests St. Ambrose had with the Arians and Jews of his day, and the other that they originated with the battle of Parabiago in 1339, when Lodrisio Visconti was defeated and taken prisoner by his cousin, Duke Azzo, with the assistance of St. Ambrose, whose miraculous appearance in the sky during the battle, on horseback, and fighting with his whip on the side of the Duke, contributed to the victory.

In commemoration of this a decree was made by the city of Milan, that St. Ambrose was for ever after to be represented armed with his whip.⁶

Some sculptures on the now demolished Porta di Romano at Milan, said to have been executed a century and a-half before the battle of Parabiago, and which are said to have shown St. Ambrose armed with his whip, are mentioned as evidence of the Arian theory.

M. Cahier, in his *Caractéristiques des Saints*, vol. ii. p. 430, has an illustration somewhat similar to my Fig. 6 (only the figures are turned to the left instead of the right), which he says is copied from a small picture of the fifteenth century, numbered 203 in the catalogue of the Musée Napoleon III., and described as—"A holy bishop on horseback armed with stirrup leathers," and he quotes from Verri,⁷ "The Milanese relate that St. Ambrose appeared thus at the battle of Parabiago in 1339, to save his people in a conflict where they ran great risk; in commemoration of this a festival was established by the city to be celebrated annually."

⁵ *Le Moneti di Milano*, F. and E. Gnechi. Prefazione lxvii.

⁶ Donati Bossi, *Cronaca*.

⁷ Verri, *Storia di Milano*, t. I. cap. xi.



To recapitulate:—There does not appear to be any authentic coin-representation of St. Ambrose armed with the whip earlier than Fig. 3, struck between 1354 and 1378, twenty years after the battle of Parabiago; and the earliest representation of his fighting with the so-called Arians, is in Figs. 4 and 5, struck between 1466 and 1478, one hundred and thirty years after that battle.

I am therefore inclined to believe, that the representation of the saint on horseback fighting with soldiers, occurring as it does, not only on coins, but also in contemporary paintings, must have been the embodiment of a tradition probably originating with the battle of Parabiago, poetically viewed through a vista of four generations; perhaps the simpler type, Fig. 3, may have existed previous to its occurrence on the coins, and it may have had the meaning assigned to it by the advocates of the Arian theory, but there is no satisfactory evidence of it.

The “rider,” representing the sovereign on horseback, was a favourite mediæval type, and occurs in the Scottish, French, Flemish, Neapolitan, and other series. Fig. 7 is an example struck by Filippo Maria Sforza, 1412—1447, and the subsequent representations of St. Ambrose, as on Figs. 5 and 8, appear to be an adaptation of this type.

Fig. 8 is a testone, struck for Milan by Louis XII. of France, who was Duke from 1500 to 1512, by right of his grandmother, Valentina Visconti; the figure represents St. Ambrose, and coins with the same type were struck by the Emperor Charles V. and also by Philip II.

A remarkable type, representing the saint enthroned in the clouds, with some allegorical figures prostrate at his feet, and suggestive of the Arian theory, was struck by the last-mentioned sovereign. Maria Theresa, 1740—1780, struck a zecchino, with the bishop represented in

the act of benediction, and this was the last appearance of St. Ambrose on the coins of Milan.

Fig. 9 is a *grosso* of Galeazzo Maria Sforza, 1466—1476; on the obverse are three firebrands, from each of which are suspended two water buckets. This type was first used by Galeazzo II. Visconti, 1354—1378, and various interpretations of its meaning have been attempted. One is that it was acquired by Galeazzo in the Holy Land, but this is improbable, the last of the crusades having terminated with the end of the previous century; it might, however, have been true of a previous Visconti. It has also been suggested that, by these emblems of fire and water, the forces of inflaming and quenching were intended to be typified. Its meaning remains obscure, and the design being inelegant was soon discontinued.

The contrary is the case as regards the reverse type of No. 9, the crowned snake, which perhaps, on account of its gracefulness, has been longer and more frequently used than any other type in the series, for after the extinction of the Viscontis it was adopted as one of the bearings in the arms of Milan.

It first occurred on the coins of Azzo and Luchino Visconti, 1329—1349, only as a mint-mark, but on those of Galeazzo II. and Barnabo, 1354—1378, it became fully developed; about the same time the dragon's head erased was introduced; it appears to be an enlarged detail of the snake type, for at first they are both represented in the act of swallowing a human figure. A variety of this type is shown on the reverse of Fig. 7.

The origin of the snake type is said to have been the destruction, in the vicinity of Milan, by Ugo Visconti, of some obnoxious reptile, whose pestilential breath was fatal to human life, but this should probably be taken in

a figurative sense, and as another instance of a myth which originated in the earliest ages, and is met with in almost every country.

JOHN G. HALL.

DESCRIPTIONS OF THE COINS REFERRED TO IN THE FOREGOING PAPER, AND ILLUSTRATED IN PLATE VIII.

HENRY VII. OF GERMANY. 1311—1312.

1. *Obv.*—† HENRIVS REX. Cross cantonné with four trefoils.

Rev.—MEDIOLANVM. St. Ambrose seated, with right hand raised in the act of benediction. Grosso. \mathcal{R} . 59 grains. Gnecci, iv. 13.

HENRY VII. 1312—1313.

2. *Obv.*—HNRIC I.PAT vertically, between SS. Gervasius and Protasius; in the margin, S. PROTASI . S . GERVASI.

Rev.—S . AMBROSI . MEDIOLANVM. St. Ambrose seated, with right hand raised in the act of benediction. Grosso. \mathcal{R} . 70 grains. Gnecci, iv. 10.

GALEAZZO II. AND BARNABO. 1354—1378.

3. *Obv.*—† BERNABOS . Z . GALEAZ . VICECOMITES. In field the Visconti snake, with B . G . above an eagle; the whole surrounded by a quatrefoil, with trefoils in the spandrels.

Rev.—S . AMBROSI . MEDIOLANV. St. Ambrose seated, holding in his right hand a whip with triple thong. Pegione. \mathcal{R} . 36 grains. Gnecci, vi. 11.

GALEAZZO MARIA SFORZA. 1466—1476.

4. *Obv.*—Snake GALEAZ . MA . SF. VICECOS . DVX . MELI . V. Bareheaded bust of Duke in armour to right. In field 6Z . M.

Rev.—S . AMBROSI. The saint attacking with his whip a soldier whom he holds with his left hand. Grosso. 36 grains. Gneccchi, xiv. 5.

GALEAZZO MARIA SFORZA. 1466—1476.

5. *Obv.*—Snake. GALEAZ . MA . SF . VICECOS . DVX . MELI . V. Bareheaded bust of the Duke in armour to right.

Rev.—S . AMBROSI . MELI. St. Ambrose on horseback galloping to right, attacking with his whip some soldiers, one of whom has fallen under the horse's feet. Grosso. *R.* 56 grains. Gneccchi, xiv. 4.

6. Sketch of painting attributed to Giovenone of Vercelli. Size of panel, $30\frac{1}{2}$ in. \times $17\frac{1}{4}$ in.

FILIPPO MARIA VISCONTI. 1412—1447.

7. *Obv.*—† FILIPV . MARIA . ANGLV. The Duke on horseback galloping to right.

Rev.—† DVX . MEDIOLANI . Z . C. The ducal crest surmounted by the dragon's head; below, shield with snake. In field, FI . MA . crowned, the whole enclosed within a quatrefoiled square. Fiorino d'oro. $54\frac{1}{2}$ grains. Gneccchi, x. 6.

LOUIS XII. OF FRANCE, DUKE OF MILAN. 1500—1512.

8. *Obv.*—† LVDOVICVS . D . G . FRANCORVM . REX . Bust of the King to right, wearing biretta and surrounded by fleur de lis.

Rev.—MEDIOLANI . DVX. St. Ambrose on horseback galloping to right, with whip upraised. Beneath, the escutcheon of France, crowned. Testone. *R.* 140 grains. Gneccchi, xix. 1.

GALEAZZO MARIA SFORZA. 1458—1476.

9. *Obv.*—In margin, small head of St. Ambrose. GZ . M . SF . VICECOS . DVX . MELI . V. Three firebrands with two water buckets suspended from each.

Rev.—Head as on obverse. PP . ANGLE . Q . CO . AO . JANVE . D. Crowned snake flanked by the letters G . M. also crowned. Grosso. *R.* 34 grains. Gneccchi, xiv. 6.

XII.

ENGLISH PERSONAL MEDALS FROM 1760.

IN the *Numismatic Chronicle* of last year Mr. Warwick Wroth gave a list of the English personal medals in the British Museum struck after 1760, the publication of Hawkins' *Medallic Illustrations* having furnished a full account of all English medals issued prior to the death of George II. At the time that Mr. Wroth published his list I undertook to give on some future occasions, when space could be found in the *Numismatic Chronicle*, a detailed account of the more important medals enumerated in that list. This undertaking I am now about to fulfil, and I hope that the description of these medals may serve as the first instalment of a future treatise on the whole series, which will form a continuation of the work begun by Mr. Hawkins.

In the *Medallic Illustrations* the medals are given in their chronological order; but as the pieces hereafter described are only a selection from the general series, I think with Mr. Wroth that an alphabetical arrangement is certainly the better, and to that I have accordingly adhered. I shall, however, describe the medals of each individual in their chronological order, so far as I am able to do so. Mr. Wroth in his prefatory notice says: "A liberal interpretation has been given to the term 'personal,' and I have generally included not only medals struck with the sole purpose of commemorating an individual, but also those specimens which incidentally record

Abercromby was wounded in the engagement whilst riding in front of his troops and died seven days afterwards. He was buried at Malta.

LANDING AT ABOUKIR BAY, 8 Mar., 1801.

2. *Obv.*—Bust of Abercromby facing, in military dress, and wearing the ribbon and star of the Bath.
Leg. LIEUT: GENL: SIR R: ABERCROMBY.
 Below bust, MUDIE DIR: WEBB F:

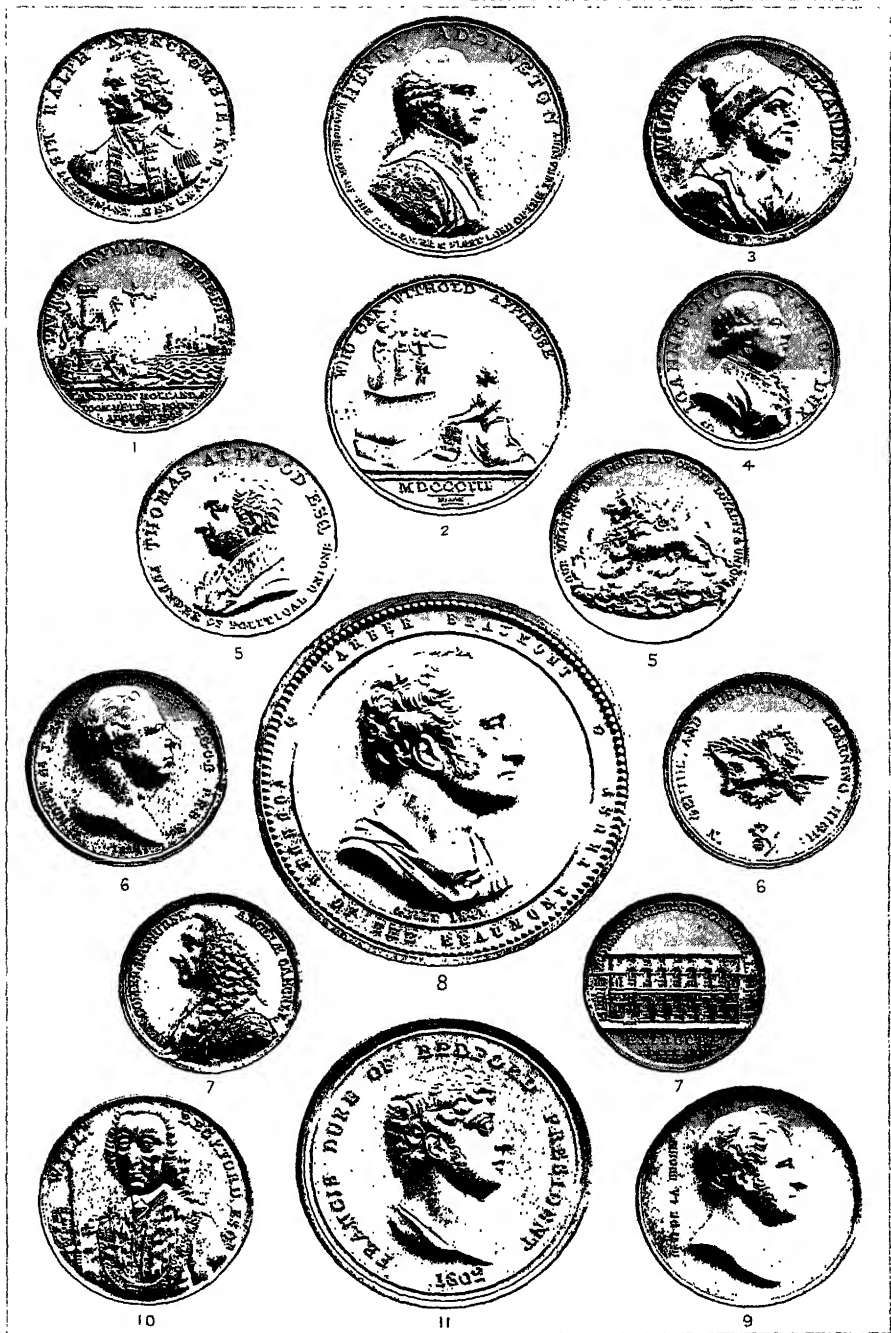
Rev.—Horse walking to right; in the background, three pyramids. *Leg.* ARRIVAL OF THE ENGLISH IN EGYPT. In the exergue, 8 MARCH 1801.

1.65. MB. Æ. ST. Mudie's Medals, No. viii.

This medal commemorates the landing of the English army at Aboukir Bay on the 8th March, 1801. This was effected in the face of the enemy, who kept up a most destructive fire upon the boats as they approached the shore. This piece forms one of the series of national medals issued by James Mudie in 1820. He explains the type of the reverse as follows: "The horse is of that noble species, of that high mettle which is alone worthy of typifying the character of the brave army which performed those exploits in Egypt which must ever live in military renown. He receives a momentary impression, but is so far from retreating that he makes good his stand."

BATTLE OF ALEXANDRIA AND DEATH OF ABERCROMBY, 1801.

3. *Obv.*—Bust of Abercromby to right, bare: on truncation, G.F. (G. F. Pidgeon.) *Leg.* ABERCROMBIUS DUX IN EGYPTO CECIDIT VICTOR. 28 MAR 1801.



ENGLISH PERSONAL MEDALS.

($\frac{3}{4}$ of the actual size.)

Rev.—Highlander seizing standard from enemy, the standard is inscribed, PASSAGE DE LA PAVIA; at their feet, crocodile; in the background, sand-hills and column; in the exergue, B. WEST. P.R.A. PIDGEON. F. *Leg.* NA FIR A CHOISIN BUAIDH SAN EPHAIT. 21 MAR 1801. (The men who gained the victory in Egypt.)

1.95. MB. Æ gilt.

In this engagement the attack was commenced by the enemy with the "Invincible Legion," a regiment of 1,300 picked Grenadiers, to whom the Directory had presented a standard called the "Invincible Standard." The onslaught was upon the 42nd Regiment of Highlanders, which was mistaken for Turkish. They penetrated the British lines, and being nobly opposed, and refusing to surrender, were every man killed, and buried within our lines. The reverse type of the above medal refers to this incident in the battle.

DEATH OF ABERCROMBY, 27 MAR., 1801.

4. *Obv.*—Bust of Abercromby to left in military dress, and looking through eye-glass, which he holds in his right hand. *Leg.* SIR RALPH ABERCROMBIE. K.B.

Rev.—Britannia reclining at the base of a monument inscribed, WOUNDED MAR. 21 DIED MAR. 28 1801, and weeping: in the distance, battle, the French fleeing. In the exergue, FRENCH DEFEATED MAR. 21 1801.

1.55. MB. Æ.

After Abercromby was wounded in the thigh by a musket-ball he was carried on board the *Foudroyant*, the flag-ship, where he expired seven days afterwards. A variety of the medal has the obverse of No. 1.

DEATH OF ABERCROMBY, 28 MAR., 1801.

5. *Obv.*—Bust of Lord Keith to left in naval dress with ribbon of the Bath and star on his breast. *Leg.* LORD KEITH K.B. VICE ADMIRAL OF THE RED. HANCOCK.

Rev.—Highlander leaning on base of monument and looking up at the upper part, which bears a portrait of Abercromby; the base is ornamented with a bas-relief representing that general shot whilst leading his cavalry. Behind the monument, trophies of flags and arms. *Leg.* 1801. SIR RALPH ABERCROMBY WOUNDED MARCH 21 DIED MARCH 25.

1.9. MB. Æ.

In November, 1799, Lord Keith, who had been appointed Vice-Admiral of the Red, succeeded Earl St. Vincent as Commander-in-Chief of the Mediterranean. When Abercromby was ordered to Egypt, Keith accompanied, and so materially assisted the expedition that he received the thanks of Parliament, was raised to the British peerage by the title of Baron Keith, and made Admiral of the Blue.

ACKERMANN'S HONORARY MEDAL, 1795?

Obv.—Minerva standing towards right, leaning right arm on weaving machine, and resting left hand on the head of an owl, which stands on wreathed pedestal; around are various implements of art, science, and agriculture. In the exergue, PIGEON. F.

Rev.—Within laurel-wreath, surmounted by serpent holding its tail in its mouth, ACKERMANN'S HONORARY MEDAL.

1.75. MB. Æ.

Rudolph Ackermann (1764—1834), fine-art publisher and bookseller, was a native of Stolberg in Saxony, came

to London, and about 1795 set up a print shop in the Strand. He revived a drawing-school established by Wm. Shipley, the founder of the Society of Arts. The school was closed in 1806, on account of the increase of his publishing business. Ackermann was of an ingenious and enterprising spirit. He patented a method to render paper-cloth, &c., waterproof, was amongst the first of private individuals to illuminate his place with gas, and patented moveable carriage axles. He died at Finchley 30th March, 1834, and was buried in St. Clement Danes. It is probable that the above medal was intended for a reward connected with his fine-art school.

HENRY ADDINGTON, VISCOUNT SIDMOUTH, 1757—1844.

STATE OF ENGLAND, 1803.

Obv.—Bust of Addington to right, in court dress. *Leg.*
HENRY ADDINGTON . CHANCELLOR OF
THE EXCHEQUER & FIRST LORD OF THE
TREASURY. On truncation, I. G. HANCOCK.

Rev.—Female figure holding scroll, inscribed STATE OF
THE NATION, kneeling before a pedestal sur-
mounted by figures of Britannia, Justice, and
Time; in the distance Westminster Abbey. *Leg.*
WHO CAN WITHOLD APPLAUSE. In the
exergue, MDCCCIII. K. & K. (Kempson &
Kindon.)

1.95. MB. Æ. Pl. IX. 2.

Henry Addington, Viscount Sidmouth, statesman, born 1757; elected Speaker of the House of Commons 1789, Prime Minister, 1801—1804; raised to the peerage in 1805 and appointed President of the Council; Home Secretary, 1812—1822; died 1844. This medal refers to the peaceable state of England, as well as of Europe, in 1803, brought about by the Peace of Amiens, 27th March,

1802—which treaty, though not particularly favourable to English interests, was highly popular. Peter Kempson and James Kindon were manufacturers of medals at Birmingham at the beginning of this century.

WILLIAM ALEXANDER, ALDERMAN, 1785.

Obv.—Bust of Alexander to right, with draped shoulders, and wearing conical-shaped cap; below, MOSSOP.
Leg. WILLIAM ALEXANDER.

Rev.—Plain.

1·7. MB. Æ. Pl. IX. 3.

This medal was executed by William Mossop in 1785. William Alexander was a leading Dublin merchant, who lived at 15, Sackville Place; in 1779 he became alderman, and in 1788 Lord Mayor. He was afterwards appointed a superintendent magistrate, and in this capacity ordered the arrest of Henry Sheares in 1798.

[VISCOUNT ALTHORP (JOHN CHARLES, EARL SPENCER),
see THOMAS ATWOOD and EARL GREY.]

MARQUIS OF ANGLESEY, 1768—1854.

CHARGE OF THE 2ND BRIGADE AT WATERLOO, 1815.

Obv.—Head of the Marquis of Anglesey to right, bare: on truncation, MILLS F.; below, c (Sir F. Chantrey).
Leg. HENRY WILLIAM MARQUIS OF ANGLESEY.

Rev.—The Marquis on horseback to left, leading charge of cavalry against the enemy: before him in the background a French soldier in despair breaking his standard across his knee: beneath, horse, arms, &c. *Leg.* CHARGE OF THE BRITISH AT WATERLOO. J. MUDIE DIREX. In the exergue, JUNE XVIII. MDCCCXV. DEPAULIS F.

1·6. MB. Æ. Mudie's Medals, No. xxxiv.

Henry William, 2nd Earl of Uxbridge, afterwards Marquis of Anglesey; served under the Duke of York in the revolutionary war with France, under Sir John Moore in Spain, and under the Duke of Wellington during nearly the whole of the Peninsular War. He was afterwards present at the Battle of Waterloo, where he led the gallant charge of the second brigade, which mainly contributed to that great victory. The three regiments (1st, 2nd, and 6th Dragoons) which composed the second brigade were typically representative of the British empire—the Royals, the Greys, and the Inniskillens. His lordship was wounded in the charge in the knee, which necessitated the amputation of his right leg. For his gallant conduct at Waterloo he was elevated to the dignity of a marquisate (4th July, 1815). This medal is one of the Mudie series. The head on the obverse is copied from a bust executed by Sir Francis Chantrey.

W. ARCHDEKNE?

Obv.—Bust to left in frock-coat: above, W A; below, 1823.

Rev.—Wreath.

2.15. MB. Æ.

I have not been able to identify this personage. The attribution to W. Archdekne is that of the late Mr. Hawkins. The name of Archdeckne is very uncommon, but that of Arcedekne is well known in Suffolk as the owners of Glevering Hall. Chaloner Arcedekne of that place had a son Walter, who was born about 1785, to whom this medal might refer. It appears to be a prize medal.

[ARCHBISHOP OF ARMAGH, see ROKEBY, BARON (RICHARD ROBINSON).]

JOHN ASHBY, STOCKBROKER, 1831.

Obv.—A bull with human head walking to left ; head raised ; below, JOHN ASHBY STOCK BROKER N° 3 BARTHOLOMEW LANE BANK.

Rev.—A bear with human head walking to right ; head lowered ; below—

FIX'D HOLIDAYS

JAN.	1 . 6 . 25.	JULY	19 . 25.
—	29 . 30.	AUGUST	24.
FEB.	2 . 24.	SEPT.	2 . 21 . 29.
MARCH	25.	OCTOBER	18 . 28.
APRIL	23.	NOV. 1 . 4 . 5 . 9 . 30.	
MAY	1 . 29.	DECEMBER	21.
JUNE	11 . 24 . 29.	25 . 26 . 27 . 28.	

OFFICE HOURS FROM 10 TO 3

Æ 1·4. MB. Æ.

This is merely a broker's ticket, used as an advertisement for his business. The bull and bear no doubt refer to the practice of bulling and bearing on the Stock Exchange. The following piece is of a somewhat later date, when John Ashby had taken a partner named George White Young.

JOHN ASHBY and GEORGE WHITE YOUNG, STOCK-BROKERS, 1832 ?

Obv.—A bull with human head standing to left ; below, ASHBY & YOUNG STOCK BROKERS N° 3 BARTHOLOMEW LANE BANK. T. B (Artist's initials).

Rev.—A bear with human head standing to right ; below—

FIXED HOLIDAYS

JANUARY	1 . 6.	JULY .	25.
—	25 . 30.	AUGUST	24.
FEB.	24.	NOV. 1 . 4 . 5 .	30.
MAY	1 . 29.	DECEMBER	25.

GOOD FRIDAY

WHIT-MONDAY & TUESDAY

OFFICE HOURS FROM 10 TO 3

1.4. MB. ST.

A piece similar to the preceding.

JOSEPH ASKINS, VENTRILOQUIST, 1796.

1. *Obv.*—Askings walking to left, wearing tall hat, frock-coat, &c.. *Leg.* MR. JOSEPH ASKINS.

Rev.—Inscription, THE CELEBRATED VENTRILOQUIST 1796.

1.15. MB. Æ.

This and the following piece were struck either as passes to Askings's entertainments, or for advertising his business.

ANOTHER.

2. *Obv.*—Askings walking to left, as on the preceding piece.

Rev.—Within floral wreath monogram of I. A. (Joseph Askings); around, THE . CELEBRATED . VENTRILOQUIST. 1796.

1.2. MB. Æ.

There is a third piece, similar to the above, but with an anchor instead of monogram in the centre of the reverse.

JOHN MURRAY, THIRD DUKE OF ATHOL, 1729—1774.

DEATH, 5 NOV., 1774.

Obv.—Bust of the Duke of Athol to right wearing embroidered coat and ribbon of the Order of the Thistle across his breast: below, KIRK . F. *Leg.* IOANNES . MURRAY . ATHOL . DUX.

Rev.—Female figure seated on ground in attitude of distress. *Leg.* QUIS . TEMPERET . A . LACHRYMIS. In the exergue, NAT . VI . MAII . MDCCXXIX . OB . V . NOV . MDCCLXXIV. KIRK . F.

145. MB. Æ. Pl. IX. 4.

John Murray, 3rd Duke of Athol and grandson of the 1st Duke, born 6th May, 1729, died 5th November, 1774; succeeded his uncle, the 2nd Duke, in 1764. He was created a Knight of the Order of the Thistle in 1767.

JOHN MURRAY, FIFTH DUKE OF ATHOL, 1778—1846.

BRIDGE OF DUNKELD BUILT, 1808.

Obv.—View of the bridge and the Tay: above, BRIDGE OF DUNKELD; below, LENGTH 685 F^t BREADTH 27 AND CENTRE ARCH IS 90 FEET.

Rev.—Inscription, BUILT BY THE MOST NOBLE JOHN DUKE OF ATHOLL EXPENCE ABOVE L 30.000 FOUNDED 24TH JUNE 1805 AND OPEN'D THE 7TH NOV^R 1808.

2. MB. Æ.

The inscription on the reverse sufficiently explains the purport of this medal.

H. W. ATKINSON, PROVOST OF MONEYS OF THE ROYAL
MINT, and SUSANNA his WIFE.

FIFTIETH ANNIVERSARY OF WEDDING DAY, 31 AUG., 1830.

Obv.—Inscription, IN COMMEMORATION OF THE
FIFTIETH ANNIVERSARY OF THE WED-
DING DAY OF H^r. W^{am}. ATKINSON ESQ^r.
PROVOST OF THE COMPANY OF MONEY-
ERS OF HIS MAJESTY'S MINT AND
SUSANNA HIS WIFE TUESDAY THE 31
AUGUST 1830.

Rev.—Inscription, IN CELEBRATION OF THIS JOY-
FUL EVENT THEY WERE SURROUNDED
BY THEIR CHILDREN GRAND CHILDREN
GREAT GRAND CHILDREN AND RELA-
TION IN THE FIRST YEAR OF THE
REIGN OF THEIR MAJESTIES KING WIL-
LIAM THE FOURTH AND QUEEN ADE-
LAIDE WHOM GOD PRESERVE.

1-25. MB. Æ.

The inscription explains the object of this medalet. Atkinson appears to have held the office of Provost of Moneys of the Mint from 1820 to 1835. This office was only an occasional one, and was formed at the will of the Moneys themselves.

THOMAS ATTWOOD, 1783—1856.

PARLIAMENTARY REFORM ADVOCATED, 1831.

1. *Obv.*—Bust of Attwood to right, in frock-coat: on trun-
cation, HALLIDAY. *Leg.* THOMAS ATTWOOD
ESQ^{RE}. FOUNDER OF POLITICAL UNIONS.

Rev.—Inscription, THE UNCOMPROMISING ENEMY
OF CORRUPTION, AND UNWEARIED SUP-
PORTER OF PARLIAMENTARY REFORM
WHOSE COUNSELS, INCORRUPTIBLE IN-

TEGRITY, AND DEVOTION TO HIS COUNTRY'S WEAL HAVE ENDEARED HIM TO EVERY FRIEND OF RATIONAL FREEDOM.

1.6. MB. Æ. ST.

Thomas Attwood, politician and banker, born 6th October, 1783, died 6th March, 1856, first brought himself into public notice by his opposition to the orders in Council of 1812, and by his strenuous refusal to return to cash payments at the end of the war.

The denial of his currency reforms made Attwood a Parliamentary Reformer, and at the beginning of the year 1830 he formed the Birmingham Political Union, which considerably influenced the passing of the Reform Bill in 1832. When the Reform Act had given two members to Birmingham, Attwood was returned unopposed in the general election of 1832, and he represented that city in Parliament till 1840. In his later years he was afflicted with paralysis and almost disappeared from public life. This and the following medals refer to the events of 1831—1832.

PARLIAMENTARY REFORM ADVOCATED, 1831.

2. *Obv.*—Bust of Attwood to left in frock-coat: on truncation, HALLIDAY F. *Leg.* THOMAS ATTWOOD
FOUNDER OF POLITICAL UNIONS. BORN OCT. 6. 1783.

Rev.—An oak crown; beneath, inscription as on previous medal, but slightly varied.

1.6. MB. Æ.

3. *Obv.*—Bust of Attwood to left in frock-coat with fur collar.
Leg. THOMAS ATTWOOD ESQ FOUNDER
OF POLITICAL UNIONS.

Rev.—Lion walking to left on sea-shore ; in the background, mountains. *Leg.* OUR WEAPONS ARE PEACE
LAW ORDER LOYALTY & UNION.

1.65. MB. Æ. Pl. IX. 5.

This medal is by Joseph Davis, a Birmingham die-engraver.

CHIPPING NORTON POLITICAL UNION ESTABLISHED, 1831.

4. *Obv.*—A medallion with bust of Attwood to right, in frock-coat with fur collar ; around THOMAS ATTWOOD ESQ. Below medallion, FOUNDER OF POLITICAL UNIONS. Above, lion standing to right on sea-shore, head facing ; in the background, mountains. *Leg.* THE PURITY OF THE CONSTITUTION THE PEACE AND SAFETY OF THE KINGDOM. DAVIS D.

Rev.—Head of Earl Grey to right, bare ; around, EARL GREY. Above, on fasces encircled by a serpent, a dove with olive-branch in its mouth, and scroll inscribed, UNITY, LIBERTY, PROSPERITY. Below, scroll inscribed, THE REFORM BILL NOTHING LESS. *Leg.* CHIPPING NORTON POLITICAL UNION ESTABLISHED NOV. 23 1831.

1.6. MB. Æ. ST.

This medal is pierced and was worn by Members of the Chipping Norton Political Union. A variety of the piece has for reverse legend POLITICAL UNION. It may have been struck for general distribution and to be worn as a badge.

RETURN TO BIRMINGHAM FROM LONDON, 1832.

5. *Obv.*—Bust of Attwood to left, in frock-coat with fur collar. *Leg.* THOMAS ATTWOOD ESQ. FOUNDER OF POLITICAL UNIONS 25 JAN^y 1830.

Rev.—Within a wreath composed of two right hands joined and Union Jacks, alternating, is the inscription, “MAY HE LIVE LONGER THAN I HAVE TIME TO TELL HIS YEARS! EVER BE-LOV'D, AND LOVING, MAY HIS RULE BE! AND, WHEN OLD TIME SHALL LEAD HIM TO HIS END, GOODNESS AND HE FILL UP ONE MONUMENT.” The two hands below the inscription hold a Union sprig composed of the rose, shamrock, and thistle. *Leg.* TO COMMEMORATE HIS TRIUMPHANT ENTRY INTO BIRMINGHAM MAY 28 AFTER RECEIVING THE FREEDOM OF THE CITY OF LONDON * IN A BOX OF THE HEART OF BRITISH OAK MAY 23 1832 FOR HIS SERVICES IN THE CAUSE OF PARLIAMENTARY REFORM.

1.75. MB. Æ.

The date on the obverse is that of the foundation of the Birmingham Political Union. The wreath on the reverse denotes union and loyalty, on which Attwood laid special stress in his speech before the Corporation of London on the occasion of his receiving the freedom of the City. “It has been the study of my life,” said he, “to show attachment to the law, to the Crown, to the Lords and Commons, and to the institutions of this great country.” This medal is also by J. Davis.

REFORM BILL PASSED, 1832.

6. *Obv.*—Bust of Attwood to left, similar to the preceding but in his button-hole the Union Jack.

Rev.—Jugate heads to left of EARL GREY LORD BROUGHAM LORD JOHN RUSSELL & LORD ALTHORPE, which inscription encircles them.

1.35. MB. Æ.

Lord Grey, First Lord of the Treasury; Lord Brougham,

Lord Chancellor; Lord John Russell, Paymaster-General of the Forces, and Lord Althorp, Chancellor of the Exchequer, were the principal members of the Ministry who advocated the passing of the Reform Bill of 1832.

REFORM BILL PASSED, 1832.

7. *Obv.*—Bust of Attwood to left, wearing frock-coat. *Leg.*
THOMAS ATTWOOD ESQ FOUNDER OF
POLITICAL UNIONS.—ROYAL ASSENT TO
THE REFORM BILL JUNE 7. 1832.
UNITY LIBERTY PROSPERITY.

Rev.—Union sprig composed of rose, shamrock, and
thistle, tied by ribbon inscribed, UNION IS
STRENGTH. Around, in three compartments,
are the inscriptions, THE ENGLISH RE-
FORM BILL PASSED THE COMMONS 2
READING DEC 18 1831 MAJ^{TY} 162 & 3
READING MARCH 23. THE LORDS JUNE
4 MAJ^{TY} 84 ROYAL ASSENT JUNE 7
1832.—SCOTCH REFORM BILL PASSED
THE COMM^S JUNE 27 THE LORDS
JULY 13 ROYAL ASSENT JULY 17 1832.
—IRISH REFORM BILL PASSED THE
COMM^S JULY 18 THE LORDS JULY 30
ROYAL ASSENT AUG 7 1832.

1.75. MB. Æ.

The inscription of the reverse explains the purport of this medal.

PASSING OF ENGLISH REFORM BILL IN THE HOUSE OF
LORDS, 1832.

8. *Obv.*—The Union Jack in enamel; around, T. ATTWOOD
ESQ VICTORIOUS UNITY.

Rev.—Inscription, THE REFORMATION OF THE
PEOPLE'S RIGHTS. PASS'D BY A MA-
JORITY. OF 84 IN THE HOUSE OF LORDS
JUNE 4, 1832.

1.1. MB. Brass.

This was a badge for general distribution. For other medals of Thomas Attwood see Earl Grey and Joshua Scholefield.

[W. AUSTIN, see D. COLGATE.]

SIR JOSEPH BANKS, BART., 1743—1820.

HORTICULTURAL SOCIETY'S MEDAL, 1816.

1. *Obv.*—Bust of Banks to right, bare: below, T WYON.
JUN : D. W. WYON. S. *Leg.* R^T. HON^{BLE} S^R. J.
BANKS BAR^T. K.G.C.B., P.R.S. &c. 1816.

Rev.—Open book, on which rest wheatsheaf and garland of flowers. *Leg.* IN GENIUS, AND SUBSTANTIAL LEARNING HIGH :

1.6. MB. *Æ*. Pl. IX. 6.

Sir Joseph Banks, the eminent naturalist and philosopher, born 4th January, 1743, was educated at Eton and Oxford, and having developed at an early age a great taste for botany, was elected, in 1766, a Fellow of the Royal Society. In 1767, he accompanied Captain Cook in his voyage round the world, and during this journey amassed a large collection of objects of natural history which he afterwards bequeathed to the nation. In 1777, Banks was elected President of the Royal Society and held that post till his death, 19th June, 1820. I have not been able to ascertain for which Horticultural Society this medal was struck.

THE HORTICULTURAL SOCIETY OF LONDON, 1820.

2. *Obv.*—Head of Banks to right, bare: below, W : WYON.
SC. *Leg.* SIR JOSEPH BANKS BAR^T P :
R : S : BORN 1743. DIED 1820.

Rev.—Inscription, THE HORTICULTURAL SOCIETY OF LONDON.

1.5. MB. *Æ*. *Æ*.

This is one of the prize medals of the Horticultural Society of London, of which Sir Joseph Banks was an active member. The reverse is plain to admit of the recipient's name.

[ROBERT BANKS, see LIVERPOOL, EARL OF.]

HENRY, SECOND EARL BATHURST, 1714—1794.

ERECTION OF THE NEW HALL OF THE SIX CLERKS' OFFICE, 1776.

1. *Obv.*—Bust of Earl Bathurst to left, in long wig and Chancellor's robes. *Leg.* HEN.COMES.BATHURST.
ANGLIÆ CANCELL. GOSSET. M. KIRK. F.

Rev.—Façade of the Hall of the Six Clerks' Office. *Leg.*
ÆDES . SEX . CLER : CUR : CANCEL : In
the exergue, EXTRUCTÆ (*sic*) MDCCLXXVI.
KIRK. F.

1.4. MB. *Æ*. *Æ*. Pl. IX. 7.

Henry, 2nd Earl Bathurst, the second but eldest surviving son of the 1st Earl Bathurst, born 2nd May, 1714, was educated at Oxford and called to the bar at Lincoln's Inn. He sat in Parliament for Cirencester from 1735 to 1754, and allying himself with the opposition held the office of Solicitor-General and Attorney-General to Prince Frederick. In 1771, he was created Lord Chancellor and raised to the peerage as Baron Apsley. This office he resigned in 1778, and from 1779 to 1782 filled the post of Lord President of the Council. He succeeded to the earldom on his father's death in 1775, and died 6th August, 1794. The Six Clerks' Office was attached to the

Court of Chancery and was of ancient foundation, probably contemporary with the Court itself. The officers, six in number, were appointed by the Master of the Rolls, and their duties consisted in receiving and filing all proceedings, in signing all office copies of pleadings, in issuing certain patents which passed the Great Seal, such as patents for ambassadors, &c. The office was abolished in 1842. The building, the erection of which is commemorated by this medal, was in Chancery Lane.

BADGE (?) OF EARL BATHURST.

2. *Obv.*—Bust of Bathurst to left, similar to the preceding.

Rev.—Plain.

1·2 by 1. MB. Æ.

This may have been intended for a badge or else as a model for a medal. It appears to be the work of Kirk.

GEORGE VALENTIN BAUERT, 1750—1810.

Obv.—Bust of Bauert to left, in loose-fitting coat.

No reverse.

1·5. MB. lead.

George Valentin Bauert, a Swede, was the son of John Ephraim Bauert, the medallist, who was in the service of Frederick V. of Denmark. Bauert studied die-engraving in England and afterwards from 1790—1810 worked at Altona. A paper on the back of this piece states that it is the "obverse of a medal of Monsi^r. Bauert, a pupil of John Milton's, done by Milton, Jun., and never finish'd, extremely rare; the only one struck."

JOHN THOMAS BARBER BEAUMONT, 1774—1841.

THE CORPS OF THE DUKE OF CUMBERLAND'S SHARP SHOOTERS
FOUNDED, 1803.

1. *Obv.*—Head of Barber Beaumont to left, bare. *Ley.* BARBER BEAUMONT.

Rev.—Inscription, THE DUKE OF CUMBERLAND'S
SHARP SHOOTERS. THE FIRST VOLUN-
TEER RIFLE CORPS IN GREAT BRITAIN
WAS RAISED IN 1803.

1.65. MB. Æ.

John Thomas Barber Beaumont, painter, author, and philanthropist, usually known as Barber Beaumont, was born 21st December, 1774. He devoted his early life to historic painting, and at the time of Napoleon's threatened invasion of England in 1803, he raised a rifle corps called "The Duke of Cumberland's Sharp Shooters," which he trained so perfectly in rifle practice, that on one occasion he held the target in Hyde Park while his entire corps fired at it from a distance of one hundred and fifty yards. This corps retained its organization as a rifle club when other Volunteers were disbanded. In 1835, it was permitted by the Duchess of Kent to take the name of the Royal Victoria Rifle Club, and at the present time it is known as the 1st Middlesex Rifle Volunteer Corps (Victoria Rifles). In 1806, Beaumont founded the "Provident Institution or Bank for Savings" in Covent Garden, and in the same year the County Fire and the Provident Life Offices. The people and their requirements were also his special care, and besides a close attention to their physical wants he originated in 1839—40 a literary and scientific institution called the Beaumont Philosophical Institution, in Beaumont Square, by the means of which he sought to

instil into the working classes the moral and mental benefits to be derived from art, science, and literature, and to provide the inhabitants of East London "with intellectual improvements, practical recreation and amusement." At his death, in May, 1841, he left £13,000 for the maintenance of that Institution.

DEATH OF BARBER BEAUMONT, &c., 15 MAY, 1841.

2. *Obv.*—Bust of Barber Beaumont to right, draped: on truncation, G. R. COLLIS. F. *Leg.* BARBER BEAUMONT OBIT 15 MAY. 1841.

Rev.—Façade of the Philosophical Institution. *Leg.* PHILOSOPHICAL INSTITUTION. In the exergue, FOUNDED 1840.

2.2. W. S. Beaumont. Æ.

This medal commemorates the death of Beaumont, and also gives a view of the Institution, which he had founded in the previous year, and which is referred to in the note to the previous medal.

THE BEAUMONT TRUST, 1883.

3. *Obv.*—Bust of Barber Beaumont to right, drapery over his shoulders. On truncation, G. G. ADAMS. F. Below, OBIT 1841. *Leg.* BARBER BEAUMONT ∴ FOUNDER OF THE BEAUMONT TRUST ∴

Rev.—Wreath of laurel, with the Beaumont coat-of-arms and crest above; in the centre is inscribed, TO THE BRITISH MUSEUM. *Leg.* PRESENTED BY JOHN AUGUSTUS BEAUMONT ∴ 1886 ∴

3. MB. Æ. Pl. IX. 8.

Barber Beaumont having died within a year after the erection of the Philosophical Institution the building fell

to the trustees of the estate under the Mortmain Act; the £13,000 bequeathed by the founder for its maintenance also remained in the hands of the trustees, who for many years kept the Institution going; but in 1880 from unavoidable causes the hall was closed, and it has since become one of the most active Conservative Clubs in East London. The £13,000 was handed over to the Charity Commissioners, who appointed new trustees, and with them originated the idea of founding the building recently opened by Her Majesty the Queen called "The People's Palace." John Augustus Beaumont, who caused this medal to be struck, was the son of Barber Beaumont, and as early as the year 1824 participated in the labours and philanthropic works of his father and aided him with undeviating industry and perseverance. It was through the efforts of this son that the Philosophical Institution owed its existence for over a period of forty years. John Augustus Beaumont died in 1886, and thus did not live to see the great accomplishment of his and his father's exertions. The centre of the reverse of the above medal is plain, to receive the name of the institution or person to whom it is presented.

SIR HENRY THOMAS DE LA BECHE, 1796—1855.

GOOD CONDUCT MEDAL.

Obv.—Bust of De La Beche to right, bare: on truncation, W WYON . R . A. Behind, H. T. DE LA BECHE.

Rev.—Grove of palms, cocoa-trees, and tropical plants.
Leg. REWARD FOR GOOD CONDUCT. In the exergue, HALSE HALL JAMAICA.

1.8. MB. Æ. Pl. IX. 9.

Sir Henry Thomas De La Beche, geologist, born in 1796, died 13th April, 1855. He studied geology from

an early age and contributed many valuable papers to the *Transactions of the Geological Society*, the *Philosophical Magazine*, and other scientific journals. In 1832 he was appointed by the Government to conduct the proposed geological survey under the Board of Ordnance. In 1851, he with the assistance of others established the School of Mines and opened the museum in Jermyn Street. He was elected President of the Geological Society in 1847, and received the order of knighthood in 1848. During the last three years of his life he suffered from paralysis. The above medal was probably made for distribution amongst those connected with De La Beche's estate, Halse Hall, near Clarendon, in Jamaica. It was struck before De La Beche was knighted.

WILLIAM BECKFORD, 1705—1770.

PRIVILEGES AND LIBERTIES OF THE CITIZENS OF LONDON ASSERTED, 1770.

1. *Obv.*—Bust of Beckford to right, in wig and official robes of Lord Mayor; around his neck, collar of office.
Leg. W BECKFORD ESQ. LORD MAYOR
OF LONDON.

Rev.—Female figure, Justice, seated to left, head facing, on pile of books; one open in front, is inscribed, MAGNA CHARTA. She holds in her right hand scales, and in her left staff surmounted by cap of liberty. *Leg.* TRUE TO HIS TRUST. In the exergue, 1770.

1.35. MB. Æ. Pl. IX. 10.

William Beckford, Alderman and twice Lord Mayor of London, born in Jamaica in 1705, came to England in 1723, and establishing himself as a merchant in London, was elected Lord Mayor in 1762 and 1769. He sat in

Parliament at various times for London and Petersfield. During his mayoralty in 1762, he was the firm ally and supporter of Wilkes; and his second term of office in 1769—1770 was remarkable for a speech which he made to the King in asserting the right of the citizens of London to appeal against certain false returns made at the Middlesex election, to which circumstance this and the following medal refer. Beckford died in London 21st June, 1770. This medal is the work of J. Kirk.

DEATH OF BECKFORD, 1770.

2. *Obv.*—Bust of Beckford three-quarters to left, similar to the preceding: on left, sword and mace. *Leg.* WILL BECKFORD. ESQ^R.

Rev.—Inscription, THE . ZEALOUS . ADVOCATE . & INVARIABLE . PROTECTOR OF . THE . RIGHTS . PRIVILEGES & LIBERTIES OF . THE . PEOPLE. In the exergue, OBIT . 21 . JUN. 1770 ANNO . ÆTATIS 65.

1·7. MB. R. Æ.

MEMORIAL OF BECKFORD, 1773.

3. *Obv.*—Bust of Beckford to left, similar to No. 1. On either side, KIRK FEC.

Rev.—Inscription, RIGHT HONOURABLE WILLIAM BECKFORD.

1. MB. Æ.

This small medal is one of a series of thirteen which were given away with as many numbers of a magazine called *The Sentimental*, published in the years 1773—1775. Some were struck in silver and given as prizes.

FRANCIS, FIFTH DUKE OF BEDFORD, 1765—1802.

BATH AND WEST OF ENGLAND AGRICULTURAL SOCIETY, 1802.

1. *Obv.*—Bust of the Duke of Bedford to right, slightly draped; below, J. MILTON F. *Leg.* FRANCIS DUKE OF BEDFORD PRESIDENT 1802.

Rev.—Britannia, seated to right, holds out a wreath to two herdsmen, one of whom is crowning an ox with a garland, the other, kneeling on left knee, rests his hand on the back of a sheep. Behind Britannia is a flag and a trident, and at her side a helmet and a shield. In the exergue, BATH AND WEST OF ENGLAND SOCIETY. The whole is surrounded by a wreath composed of ears of corn.

2.35. MB. A. ST. Pl. IX. 11.

Francis, 5th Duke of Bedford, born 4th August, 1765, died 2nd March, 1802, was specially devoted to rural science and was one of the chief patrons of the Bath and West of England Agricultural Society, of which he was president at the time of his death. This Society was founded in 1777.

DEATH OF THE DUKE OF BEDFORD, 1802.

2. *Obv.*—Bust of the Duke of Bedford to right, similar to the preceding; below, J MILTON F; above, ducal coronet. *Leg.* FRANCISC. DUX BEDFORDIE AGRICOLAR. FACILE PRINCEPS.

Rev.—Female figure, Agriculture, reclining to left; her left arm rests upon an urn, near which is a shepherd's crook, and in her right she holds ears of corn. *Leg.* BONI LUGENT IMMATURE ADEM-TUM. In the exergue, AGRICOLARUM COE-TUS CONSULTO.

1.6. MB. A.

This and the following medal refer to the death of the Duke of Bedford as a great loss to agricultural science.

DEATH OF THE DUKE OF BEDFORD, 1802.

3. *Obv.*—Bust of the Duke of Bedford to left, bare; on truncation, I. G. HANCOCK. F. *Leg.* FRANCISCUS DUX BEDFORDIÆ. NATUS JULII 13, 1765.

Rev.—A farmer in attitude of grief, standing facing, and leaning with left hand on broken column, draped, the capital of which is lying on the ground. At his feet are his dog and a shepherd's crook; in the distance landscape, with oxen and sheep grazing. *Leg.* TIBI VOTA QUOTANNIS AGRICOLÆ FACIENT. In the exergue, OBIIT MARTII II. MDCCCII. κ. & κ. (Kempson & Kindon).

1·7. MB. Æ.

MEMORIAL OF THE DUKE OF BEDFORD, 1802.

4. *Obv.*—Head of the Duke of Bedford to right, bare. *Leg.* FRANCIS DUKE OF BEDFORD MDCCCII.

No reverse.

17. MB. Æ.

This large medallion is probably the work of J. G. Hancock.

JOHN, SIXTH DUKE OF BEDFORD, 1766—1839.

SMITHFIELD CLUB, 1813.

1. *Obv.*—Bust of the Duke of Bedford to left, bare; below, SMITHFIELD CLUB. *Leg.* JOHN DUKE OF BEDFORD.

Rev.—Plain.

1·55. MB. Æ.

John, 6th Duke of Bedford, born 6th July, 1766, died 20th October, 1839, was, like his brother, the former Duke, devoted to agriculture, and was one of the promoters of the Smithfield Club, which had been founded in 1798 under the title of the Smithfield Cattle and Sheep Society. In 1813 the Duke offered the Club one hundred guineas annually, which he afterwards increased to one hundred and twenty-five guineas, in order that a five-guinea medal might be given to the breeders of the animals in each of the five classes. It was on this occasion that this medal was made. The reverse is left blank to receive the name of the recipient.

A variety of this medal (MB. ST.) has the inscription below the bust on a scroll.

TAVISTOCK GRAMMAR SCHOOL, 1839.

2. *Obv.*—Shield, arms of Russell impaled with the town of Tavistock, within the Garter, with ducal supporters and crest; below, on scroll, the motto, CHE SARA SARA: all on tablet inscribed, LIBERT DE TAVYSTOKE. Above B T; below, B. WYON, and two palm branches. *Leg.* MENTEM NON FRONTEM SPECTANS.

Rev.—Laurel wreath. *Leg.* HVNC HONOREM IOHANNES BEDFORDIAE DVX PROPOSVIT. ANNO CHRISTI MDCCCXXXIX.

2. MB. Æ.

This is a prize medal of the Tavistock Grammar School. It was given by the Duke of Bedford for special general efficiency to students on their quitting the school. No award, however, having taken place for several years, the medal is now considered to have lapsed.

H. A. GRUEBER.

NOTICES OF RECENT NUMISMATIC PUBLICATIONS.

Historia Numorum, a manual of Greek Numismatics, by Barclay V. Head, Assistant Keeper of Coins and Medals in the British Museum; Oxford, Clarendon Press, 1887. Royal 8vo, 42s.

Since the publication of Eckhel's *Doctrina Numorum Veterum*, nearly a century ago, no work on the science of numismatics has been produced equal in importance and width of scope to this manual by Mr. Head. It contains, in the first place, a systematic digest of countless monographs on special classes of coins, scattered in a most bewildering way through the various archæological periodicals of Europe, or printed as separate volumes, many of which are out of the reach of the majority of students.

In no branch of archæology was this work of abstracting and condensing so urgently needed, and all students of the subject will owe Mr. Head a very deep debt of gratitude for the extreme care and the wide extent of reading in many languages, which he has expended on this manual.

In addition to all this, Mr. Head gives us, in his introductory chapters, a very valuable mass of original matter. Especially an elaborate and highly interesting treatise on the various weight-standards, and their transmission throughout the Hellenic world. Mr. Head traces the different Greek standards to a common origin in the ancient Babylonian kingdom, where two quite different standards appear to have been in use at the same time, as is indicated by the inscribed bronze lion-weights, from Nineveh, which are now in the British Museum. These show that two *minæ* were used during the eleventh to the ninth century B.C.: one weighing about 1,010 grammes, and the other half that, or 505 grammes. Of these, the heavier standard was brought westward by the Phœnician traders to their colonies among the islands of the Ægean; while the lighter *mina* travelled by land to the western shores of Asia Minor, where it was adopted by the wealthy and enterprising kingdom of Lydia, in which the use of coined money probably originated.

Though both these standards were brought from the plains of the Tigris and Euphrates, Mr. Head gives the name "Babylonian" to the lighter one only, calling the other the "Phœnician," from the people who were the means of its introduction into

Western Greece. This double current of Oriental monetary system has a close analogy in the early history of Hellenic art: the same causes being at work in both cases.

Thus we find one strong infusion of Oriental influence brought by the course of Phœnician trade across the sea to Cyprus and the shores of the mainland of Greece, while through Phrygia an overland stream of art influence extended to the Ionian colonies in the west of Asia Minor.

It is interesting to compare the character and influence exercised by the Phœnicians between the tenth and the sixth century B.C., with that of the Venetian Republic during its period of greatest glory—the twelfth to the fifteenth century A.D. In both cases these two races were for a long time the chief merchants and maritime carriers of the world. Their trade extended from end to end of the Mediterranean, and their language, fashions, and art were to some degree co-extensive with their trade. Just as Phœnician art was widely spread from Syria to Spain, so the peculiar architectural forms of Venice were to be seen in countless palaces and churches along the eastern shores of the Adriatic, in Cyprus and other islands of the Mediterranean, in Athens itself, and among the ruined cities of the Syrian coast. Other analogies between the relations of these two great trading races to the rest of Southern Europe might be suggested.

The somewhat complicated history of the genesis of other Greek standards from the one common origin is clearly and minutely worked out by Mr. Head.

He shows how the Æginetic stater of 194—180 grs. came from a gradual deterioration of the heavy Phœnician mina-weight, while the Euboic standard, on the other hand, was developed from the light or Babylonian mina of Ionia.

The whole of this section requires to be read with very close attention; the various chains of argument being worked out in the fewest possible words, and an immense number of important facts condensed into very narrow limits of space. The whole book in fact makes one strongly regret that the author was obliged to pack the whole of his vast subject into a single volume. Though all the facts are arranged in the most satisfactory manner, and there is not a superfluous word to be found from end to end of the work, yet one cannot help feeling that Mr. Head's rich stores of numismatic knowledge have not been fairly exploited owing to the extreme condensation with which this *Historia Numorum* has been treated.


We may, perhaps, hope that a further instalment may follow, dealing more largely with the subjects of the most interesting types, and the art displayed by the engravers of the dies—a

subject which Professor Gardner's very valuable work has by no means exhausted.

Much of Mr. Head's *Introduction* is of far wider interest than even the wide subject of numismatics. Every student of classical learning in any branch will value the list of magistrates and other public officials, the catalogue of games and festivals, and the curiously varied titles applied to persons or cities.

To the art-student the list of coins signed with engravers' names will be specially welcome, though it makes one regret the somewhat narrow limits of time and space within which these signed pieces fall. The truth is, that for the future more time and attention will have to be given to coins by all who take any deep interest in Greek art. As Mr. Head points out, the value of these long series of delicate metal reliefs (as the coins might be called), the dates of which can be fixed with far greater certainty than those of objects of any other class, is unspeakably great to the student of Hellenic sculpture.

Allowing for their minute scale one can hardly over-estimate the archæological value or the beauty of such series as the electrum staters of Cyzicus—so well described by Canon Greenwell in the last number of the *Numismatic Chronicle*¹—or the silver didrachms of Tarentum, varying as their subjects do from the noblest heroic designs to the most realistic and yet always graceful *genre*.

To students of Greek epigraphy Mr. Head's list of Greek letter-forms will be very interesting, and few probably will not be surprised at the varieties of shapes assumed by some of the characters, especially those of the letter **B**, some of which have no resemblance whatever to the usual type. The legends on the coins of Heraclea present an interesting series, showing the modifications through which the aspirate passed before it was dropped, and its character used to express the eta. First, we have the  closed at top and bottom, and then the **H**, and thirdly **Ɔ**, which last character survived as an accent, and is written high up, like the modern rough breathing, in some MSS. of the sixth century A.D.

The survivals of early forms in some cases are very interesting, as, for example, **Λ** the Phœnician form of **M**, formed just as in the earliest Greek inscriptions of Thera (Santorin).

The various ways of differentiating the omicron and omega are curious. Some Greek Islands taking **Θ** to be long, and

¹ Unfortunately the plates which accompany this paper give but a very imperfect notion of the size and delicacy of many of these staters.

others making it represent the short **O**. The later form **Ω** is also used with opposite meanings at different places.

The classified catalogue of Greek coins, which forms the bulk of this manual, has many points which make it exceptionally useful; the date of each coin, either approximate or exact, is always given, and also, what is so often omitted in numismatic works, its current value.

It is a great advantage to have, as is the case here, the illustrations printed with the text, and perhaps only a somewhat lazy reader will regret the omission of the familiar bar inscribed with the metal in which the piece is struck.

One very valuable feature in this manual is the bibliographical list at the beginning, supplemented throughout the work with references to separate monographs on special types or classes of coins; the insertion of these references must have required a rare amount of painstaking research.

In short, the work is one which will supply what every classical student must feel to have been a very urgent want; and one cannot but feel proud that it is an English numismatist who has provided in so thorough a way what till now has been lacking, not only in England, but also in every country in Europe.

J. H. MIDDLETON,
King's College, Cambridge.

A Catalogue of the English Coins in the British Museum, Anglo-Saxon Series. Vol. I. London: 1887.

Another of the volumes of British Museum Catalogues, edited by Mr. R. Stuart Poole, has recently appeared, and will be hailed with pleasure by all English numismatists. It has been most carefully compiled by Mr. C. F. Keary, and embraces the Saxon coinages of Mercia, Kent, East Anglia, and Northumbria, as well as those of the Archbishops of Canterbury and York. Prefixed is an excellent Introduction of nearly one hundred pages, written by Mr. Keary; and appended are no less than thirty autotype Plates of the principal coins. Such a Catalogue serves at once to show the strong and the weak points in our national collection, for the author has given in italics the names of the various moneyers whose pieces are at present absent from the collection and has also mentioned some of the types which are still *desiderata*. We have here no room to enter into farther details, but the care that has been bestowed in compiling the Catalogue justifies us in recommending all those interested in the Saxon series to lose no time in becoming possessed of a copy.

XIII.

ELECTRUM COINS AND THEIR SPECIFIC GRAVITY.

I.—ELECTRUM COINS RECENTLY ACQUIRED BY THE BRITISH MUSEUM.

TWELVE years have passed since, in vol. xv. of the second series of the *Numismatic Chronicle*, under the title of "Metrological notes on ancient electrum coins," I gave an account of the early electrum coinages of western Asia Minor, and of the various systems of weight upon which these highly interesting coins throw so much light.

To that sketch and to the views which I therein expressed, I have but little just now to add, nor shall I, on the present occasion, specify the modifications which my opinions have undergone, on more than one point, since I wrote that paper. The whole subject is one which requires more study than I am now able to devote to it, but I hope that if ever it falls to my lot to catalogue this portion of the national collection, I may be able to reconsider some doubtful points in the provisional classification which I made in the article referred to.

Meantime, however, it may be useful to furnish numismatists with descriptions of the electrum coins which have been acquired by the British Museum since my article was written.

In the following list I have included not only the early

electrum of the seventh and sixth centuries B.C., but also the Cyzicene, Phocaean, Lesbian, and Lampsacene staters and hectae which belong for the most part to the fifth and fourth centuries B.C. The Cyzicenes have already been published in a recent number of the *Chronicle* by Canon Greenwell, but for completeness' sake, I have not thought it desirable to omit them on that account.

Keeping in view the extreme uncertainty of the attributions of most of the early electrum coins, I have not ventured to classify them under the headings of the towns which I have suggested as their possible or probable places of mintage, except in the case of Cyzicus, Phocaea, and Lampsacus, where the attributions are certain. It is safer for the present to adhere to the metrological system of arrangement, whereby the coins of the different standards are kept together. In several instances it will be seen that the coins admit of classification under one or other of two standards. In these cases I have been guided by a consideration of the type which the coin bears, although it must be confessed that here and there it is very doubtful whether the types of some of the smaller divisions are sufficiently characteristic to warrant the classification which I have adopted.

In the following *résumé* of the normal weights, I have confined myself to the coins described in this paper, which should therefore be studied in connection with the lists of electrum coins given in my previous articles, "Metrological Notes on Ancient Electrum Coins," *Num. Chron.*, 1875, and "Notes on Staters of Cyzicus," *Num. Chron.*, 1876 and 1877.

(i.) BABYLONIC STANDARD.

	Max.	Min.	Normal.
Stater	166.87	.	167

(ii.) PHOENICIAN STANDARD.

			Max.	Min.	Normal.
1 Stater	.	.	219.5	214.9	220.00
$\frac{1}{2}$ "	.	.	109.94	105.74	110.00
$\frac{1}{3}$ "	.	.	73.02	67.54	73.33
$\frac{1}{6}$ "	.	.	39.90 (?)	.	36.66
$\frac{1}{8}$ "	.	.	27.50	.	27.50
$\frac{1}{12}$ "	.	.	18.60	17.50	18.33
$\frac{1}{24}$ "	.	.	9.30	8.80	9.16
$\frac{1}{48}$ "	.	.	4.60	4.20	4.58
$\frac{1}{96}$ "	.	.	2.70	2.10	2.29

(iii.) ARGINETIC STANDARD.

			Max.		Normal.
$\frac{1}{48}$ Stater	.	.	3.5	.	4.00

(iv.) EUBOIC STANDARD.

			Max.	Min.	Normal.
1 Stater	.	.	133.34	123.46	135.00
$\frac{1}{2}$ "	.	.	66.09	.	67.50
$\frac{1}{3}$ "	.	.	45.83	40.60	45.00
$\frac{1}{6}$ "	.	.	22.20	20.59	22.50
$\frac{1}{12}$ "	.	.	4.60	.	5.62

(v.) PHOCAIC STANDARD.

			Max.	Min.	Normal.
1 Stater (Cyzicus).	.	.	254.10	246.30	254.00
1 " (Lampsacus)	.	.	237.00	232.20	237.00
$\frac{1}{6}$ " (Cyzicus).	.	.	41.60	41.50	42.00
$\frac{1}{6}$ " (Lesbos).	.	.	39.90	38.40	40.00
$\frac{1}{12}$ "	.	.	21.00	19.10	21.00
$\frac{1}{24}$ "	.	.	10.80	9.00	10.00
$\frac{1}{48}$ "	.	.	5.20	4.50	5.00
$\frac{1}{96}$ "	.	.	2.20	.	2.50

The above maximum and minimum weights are those of the coins mentioned in the present article, and may not represent the highest and lowest elsewhere published.

PHOENICIAN STANDARD.

STATERS (α) Early, 220 grs.

1. *Obv.*—Two lions' heads *adv.* in opposite directions separated by a fish-shaped line; the whole in an incuse enclosed in an oval frame.

Rev.—Three incuse depressions; the central one oblong, the others square.

[Pl. X. 1]. El. 219·50. (Whittall.)¹

This remarkable stater may be conjecturally assigned either to Miletus or Sardes. It probably belongs to the first half of the seventh century B.C.

2. *Obv.*—Lion with open jaws recumbent r., looking l., within an oblong frame of Maeander pattern. (Thrice struck.)

Rev.—Three incuse depressions; in the left-hand square, a stag's head r., in the central oblong a fox running l., and . . .; in the right hand square ✕.

[Pl. X. 2]. El. 214·90. (Lawson.)

I would attribute this coin to the same period as the preceding, and preferably to Miletus. The types are the same as those of the half stater engraved in *Num. Chron.*, 1875, Pl. VIII. 4. The mark ✕ on the reverse, which occurs also on the half stater, cannot be considered as a mark of value. Whether the stag's head and the fox are to be interpreted as symbolical respectively of the Ephesian Artemis and the Lydian Dionysos (Bassareus), as has been suggested by F. Lenormant, is a doubtful point.

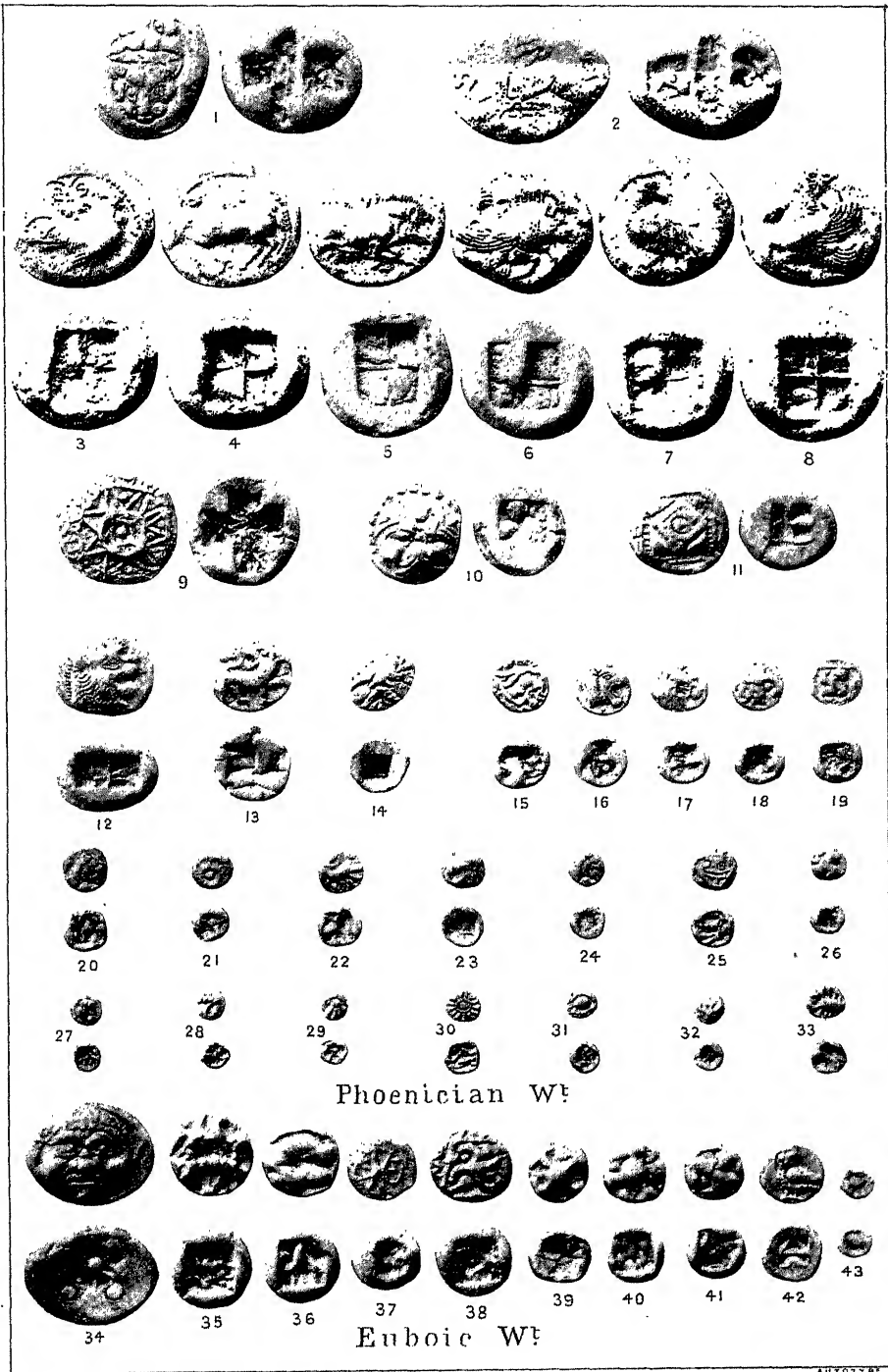
STATERS (β) Later, 220 grs.

3. *Obv.*—Cock walking r., above, floral ornament; the whole in a circle of dots.

Rev.—Quadripartite incuse square.

[Pl. X. 3]. El. 215·79. (Bank collection.)

¹ The names in parentheses are those of the cabinets from which the coins have passed into the British Museum.



The cock is the well-known type of the coins of Dardanus, on the Hellespont (Head, *Hist. Num.*, 471), where possibly this stater may have been struck; but it may be questioned whether the types on the staters of Class β are those of cities at all. The great similarity of the style and fabric of these coins suggests the possibility of their having all been struck at one mint, which, like Cyzicus, may have adopted a fresh type for each new issue. It seems to belong to a much later period than Nos. 1 and 2, though I see no reason why it may not be assigned to as early a date as the beginning of the fifth century B.C.

4. *Obv.*—Horse prancing l., beneath, flower; the whole in circle of dots.

Rev.—Quadripartite incuse square.

[Pl. X. 4]. El. 215.17. (Bank collection.)

The attribution to Cyme in Aeolis of this very rare stater, which I have, perhaps too confidently, ventured to suggest (*Hist. Num.*, p. 479), is not by any means certain.

5. *Obv.*—Sow r.

Rev.—Quadripartite incuse square.

[Pl. X. 5]. El. 216.12. (Bank collection.)

With great hesitation I would assign this coin to Methymna, in Lesbos; cf. the silver stater with a boar on the obverse, and the legend $\text{MA}\Theta\text{VMNAIO}\Sigma$ (*Brit. Mus. Guide*, Pl. XI. 27).

6. *Obv.*—Forepart of winged boar r.

Rev.—Quadripartite incuse square.

[Pl. X. 6]. El. 217.37. (Lawson.)

Coins of this type are usually attributed to Clazomenae, in Ionia (cf. Aelian, *Hist. an.*, xii. 38), but as they bear

no inscriptions, except the single letter **K** on the reverse of some *Æ* hemidrachms of a somewhat later date, we can only accept it with extreme caution.

7. *Obv.*—Eagle l., with head turned back standing on hare; the whole in circle of dots.

Rev.—Quadripartite incuse square.

[Pl. X. 7]. El. 217·52. (Whittall.)

This coin, attributed conjecturally to Abydus (*Hist. Num.*, 468), differs from the specimen engraved, *Num. Chron.* 1875, Pl. VII. 7, in that it has no dolphin in the field, and that the eagle on this specimen stands upon a hare.

8. *Obv.*—Forepart of winged horse bridled l.; above, floral ornament.

Rev.—Quadripartite incuse square.

[Pl. X. 8]. El. 215·72. (Whittall.)

Although this stater bears the same type as the one which I engraved, *Num. Chron.*, 1875, Pl. VII. 8, and there attributed to Lampsacus, it is from a different die. Both these coins are distinctly earlier in date than the electrum staters of Lampsacus, weighing 237 grs. (*cf. Brit. Mus. Guide*, Pl. X. 23, and *Num. Chron.*, 1876, Pl. VIII. 31, and the two staters of the Lampsacene standard described below, Nos. 89, 90). The attribution of the staters of Asiatic weight to Lampsacus is therefore exceedingly doubtful.

HALF-STATERS (a) Early, 110 grs.

9. *Obv.*—Stellate flower with eight rays and double circle with pellet in centre.

Rev. Cruciform incuse.

[Pl. X. 9]. Dark El. 109·05. (Whittall.)

The floral star, which may be an early form of the star-like flower of eight petals, which is the well-known type of the silver drachms of Erythrae, struck in the fifth century B.C. (*Hist. Num.* p. 499), seems to indicate that city as the probable place of mintage of this remarkable hemi-stater. M. J. P. Six has pointed out to me that the cruciform incuse is the result of a second stroke from a single oblong punch.

10. *Obv.*—Floral device consisting of three silphium-flowers(?) with a bud in the space between each; the whole forming a raised circular boss, outside which is a circle of dots.

Rev.—Incuse square.

[Pl. X. 10]. Dark El. 109.49. (Dr. Weber.)

If the flowers on this coin are rightly interpreted as those of the silphium plant, there can be little doubt that it should be assigned to Cyrene. M. Babelon (*Rev. Num.*, 1885, Pl. XV. 1), has already published a coin undoubtedly of Cyrene, which he says is composed of pure gold. It weighs 110 grs., and may be compared with advantage with the present specimen. The arrangement of the floral device is, however, quite different.

11. *Obv.*—Pattern consisting of a raised and ornamented square within a frame.

Rev.—Incuse square.

[Pl. X. 11]. Dark El. 108.42. (Whittall.)

I can offer no suggestion with regard to the precise attribution of this curious hemi-stater. As, however, it was acquired by Mr. Whittall, presumably at Smyrna, it is probable that it was struck by some city on the west coast of Asia Minor.

THIRD. 73·3 grs.

12. *Obv.*—Lion's head r., with open jaws ; above, a star.

Rev.—Oblong incuse, divided into two parts.

[Pl. X. 12]. El. 72·89. (Subhi.)

This trite of Miletus (?) may be compared with the one figured in *Num. Chron.*, 1875, Pl. VIII. 9.

SIXTH. 36·6 grs.

13. *Obv.*—Lion of rude archaic style walking r., with head turned back.

Rev.—Incuse square.

[Pl. X. 13]. El. 39·9. (Subhi.)

This coin may also be attributed conjecturally to Miletus, but as it is more than three grains heavier than it should be, it is quite possible that it may be a hekte of the Phocæic standard, and consequently of some other mint.

EIGHTH. 27·5 grs.

14. *Obv.*—Three silphium (?) flowers.

Rev.—Incuse square.

[Pl. X. 14]. El. 27·5. (Whittall.)

Whether this little coin is an *Eighth* of the Phœnician stater of 220 grs., or a light *Fourth* of the Euboic stater of 135 grs., it is difficult to say. In either case Cyrene seems to have been its place of mintage.

TWELFTHS. 18·3 grs.

15. *Obv.*—Lion's head r., with open jaws, in outline ; very archaic.

Rev.—Incuse square.

[Pl. X. 15]. El. 18·6. (Lawson.)

16. *Obv.*—Lion's head r., with open jaws ; beneath, pellet.

Rev.—Incuse square quartered (?) in one division, a pellet.

[Pl. X. 16]. El. 17·8. (Bank collection.)

17. *Obv.*—Similar. Pellet on lion's forehead. Numerous countermarks round the edge, in one of which is a recumbent stag.

Rev.—Incuse square.

[Pl. X. 17.] El. 17·5. (Lawson.)

These three coins (15—17) may perhaps all be assigned to Miletus.

18. *Obv.*—Lion's head facing.

Rev.—Incuse square.

[Pl. X. 18]. El. 18·5. (Bank collection.)

19. *Obv.*—Swastica in linear square.

Rev.—Incuse square.

[Pl. X. 19]. El. 18. (M. Panni.)

To what cities these two little coins belong I am unable to say.

TWENTY-FOURTHS. 9·16 grs.

20. *Obv.*—Lion's head r., with open jaws ; star or pellet on forehead ; another behind head.

Rev.—Incuse square.

Miletus ? [Pl. X. 20]. El. 9·2. (Bank collection.)

21. *Obv.*—Stellate flower with circle in centre containing pellet.

Rev.—Incuse square.

Erythrae ? [Pl. X. 21]. El. 9·3. (Whittall.)


22. *Obv.*—Head of bird, serpent, or pistrix.

Rev.—Incuse square.

Uncertain. [Pl. X. 22]. El. 8·8. (Bank collection.)

Forty-eighths. 4·58 grs.

23. *Obv.*—Lion's head l., with open jaws.

Rev.—Incuse divided thus, .

Miletus? [Pl. X. 23]. El. 4·3. (Whittall.)

24. *Obv.*—Lion's head and foreleg r.

Rev.—Incuse square ornamented.

Miletus? [Pl. X. 24]. El. 4·6. (Bank collection.)

25. *Obv.*—Lion's head facing.

Rev.—Incuse square.

Miletus? [Pl. X. 25]. El. 4·2. (Whittall.)

26. *Obv.*—Swastica.

Rev.—Incuse square.

Uncertain. [Pl. X. 26]. El. 4·2. (M. Panni.)

Ninety-sixths. 2·29 grs.

27. *Obv.*—Lion's head r.

Rev.—Incuse square divided by lines, 3 pellets within spaces.

Uncertain. [Pl. X. 27]. El. 2·3. (Bank collection.)

28. *Obv.*—Lion's head r.

Rev.—Incuse square.

Uncertain. [Pl. X. 28]. El. 2·2. (Bank collection.)

29. *Obv.*—Segment of stellate flower (or scallop shell?).

Rev.—Incuse square ornamented.

Erythrae? [Pl. X. 29]. El. 2·1. (Whittall.)

30. *Obv.*—Stellate flower with many petals.

Rev.—Incuse square ornamented.

Erythrae ? [Pl. X. 30]. El. 2·7. (Whittall.)

31. *Obv.*—Human eye (wrongly described as barley-corn, N. C. 1875.)

Rev.—Incuse square.

Eresus. [Pl. X. 31]. El. 2·1. (Bank collection.)

32. *Obv.*—Top of silphium (or lion's head facing?).

Rev.—Incuse square.

Cyrene ? [Pl. X. 32]. El. 2·1. (Whittall.)

AEGINETIC STANDARD ?

Forty-eighth ? 4 grs.

33. *Obv.*—Shrimp ?

Rev. Incuse square.

Uncertain. [Pl. X. 33]. El. 3·5. (Whittall.)

EUBOIC STANDARD.

Stater. 135 grs.

34. *Obv.*—Gorgon-head facing.

Rev.—Incuse containing stellate pattern with large pellet in centre and four others at extremities.

Eretria. [Pl. X. 34]. El. 123·46. (Mr. Stanton.)

I have already published this coin in *Brit. Mus. Guide*, Pl. I. 4. It is composed of a very pale-coloured electrum. I would assign it to about B.C. 700. It is the earliest representation of the Gorgoneion which occurs on Greek coins.²

² M. J. Six has been kind enough to send me a cast of a Hecte of this type.

Obv.—Gorgon-head facing.

Rev.—Incuse square, within which ⚔.

The coin is of very pale electrum. It weighs about 20·5 grs., and was found in the island of Imbros in 1884.

THIRDS. 45 grs.

35. *Obv.*—Doubtful type.

Rev.—Incuse square.

Uncertain. [Pl. X. 35]. El. 44·7. (Whittall.)

This coin is from the same dies as the specimen weighing 44·1 grs., published in my previous paper.

36. *Obv.*—Uncertain type which looked at in one aspect resembles an eagle l., with head r., devouring prey on a rock; but turned upside down looks somewhat like a lion's head and foreleg to l.

Rev.—Incuse square.

Chalcis? [Pl. X. 36]. El. 44·32. (Lawson.)

37. *Obv.*—Wheel of eight spokes, apparently double-struck.

Rev.—Incuse square.

Chalcis? [Pl. X. 37]. El. 40·6. (Whittall.)

38. *Obv.*—Tetraskelis or swastica with a pellet in each angle, apparently enclosed in a square compartment with zigzag lines outside it.

Rev.—Incuse square.

Uncertain. [Pl. X. 38]. El. 45·88. (Whittall.)

SIXTHS. 22·5 grs.

39. *Obv.*—Wheel of four spokes with large pellet in centre.

Rev.—Incuse square.

Chalcis. [Pl. X. 39]. El. 20·59. (Sava.)

40. *Obv.*—Head of silphium?

Rev.—Incuse square.

Cyrene? [Pl. X. 40]. El. 22·1. (Bank collection. Found at Priene.)

41. *Obv.*—Uncertain object.

Rev.—Incuse square.

Uncertain. [Pl. X. 41]. El. 22·2. (Bank collection. Found at Priene.)

42. *Obv.*—Owl l.

Rev.—Incuse square, in the upper part of which is a triangle.

Athens. [Pl. X. 42]. El. 21. (Payne Knight.)

I omitted this coin from my former paper on ancient electrum, because at that time I believed it to be a forgery. I am, however, now inclined to accept it as genuine, on the ground that Dr. U. Köhler (*Mitth. d. Arch. Inst. Athen.*, ix. 359) has made known as many as five other specimens in different collections, four of which were found in the neighbourhood of Athens. It would appear also that these specimens are not all from the same dies as the one in the British Museum.

If therefore these coins are indeed genuine, and not Euboean like those engraved in *Cat. Cent. Gr.*, Pl. XX. 1—3, they prove that Athens, like her neighbours, Aegina, Chalcis, and Eretria, participated to some slight extent in the widely extended electrum currency, which had its starting-point on the opposite coast of the Aegean Sea, but whether at Athens the electrum money preceded the issue of silver, or whether it is contemporary with the earliest issues in that metal, is a doubtful point.

Forty-eighth. 5·6 grs.

43. *Obv.*—Owl r. ; in front, olive spray.

Rev.—Incuse square.

Athens. [Pl. X. 43.] El. 4·6. (Lawson.)

I am not quite sure that this coin is correctly described, as the type is very indistinct. If I have rightly interpreted it, it is a most important piece of evidence in favour of the authenticity of No. 42, and of the inferences to be deduced from it.

PHOCAIC STANDARD.

SIXTH. 40 grs.

44. *Obv.*—Flower or floral star of sixteen rays, the alternate ones shorter and ending in pellets.

Rev.—Incuse square.

Erythrae ? [Pl. XI. 44]. El. 39·5. (Subhi.)

TWELFTHS. 21 grs.

45. *Obv.*—Goose or duck r., with head reverted over back.

Rev.—Incuse square.

Eion ? [Pl. XI. 45]. El. 20. (Whittall.)

46. *Obv.*—Cock's head r, and fish's head.

Rev.—Incuse square.

Uncertain. [Pl. XI. 46]. El. 20·6. (Whittall.)

47. *Obv.*—Horse's head r.

Rev.—Incuse square quartered.

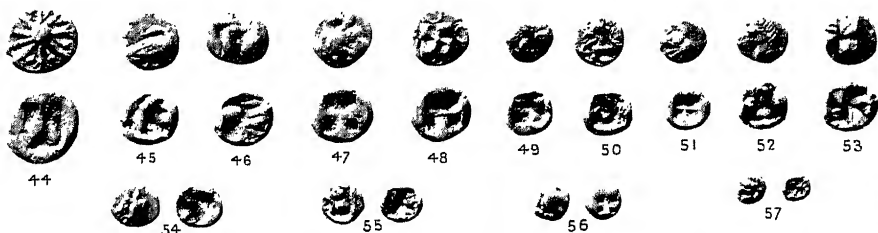
Uncertain. [Pl. XI. 47]. El. 21. (Whittall.)

48. *Obv.*—Swastica on raised square flanked by four crescents.

Rev.—Incuse square.

Uncertain. [Pl. XI. 48]. El. 19·1. (Whittall.)

The obverse of this coin bears some resemblance to the earliest drachms of Apollonia ad Rhyndacum (*Hist. Num.*, 447).



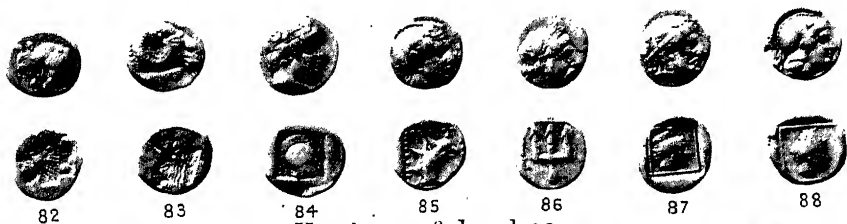
Early Phocæic.



Cyzicene.



Hecatae of Phocæa.



Hecatae of Lesbos.



Staters of Lampsacus.



TWENTY-FOURTHS. 10 grs.

49. *Obv.*—Ram's head l.

Rev.—Incuse square.

Cebrenia. [Pl. XI. 49]. El. 10·1. (Whittall.)

50. *Obv.*—Griffin seated.

Rev.—Incuse square.

Teos ? [Pl. XI. 50]. El. 9. (Whittall.)

51. *Obv.*—Griffin's head l.

Rev.—Incuse square quartered.

Teos ? [Pl. XI. 51]. El. 10·3. (Lawson.)

52. *Obv.*—Horse's head l.

Rev.—Incuse square quartered.

Uncertain. [Pl. XI. 52]. El. 9·4. (Whittall.)

53. *Obv.*—Raised square quartered. (*Cf.* No. 48 above.)

Rev.—Incuse square.

Uncertain. [Pl. XI. 53]. El. 10. (Whittall.)

FORTY-EIGHTHS. 5 grs.

54. *Obv.*—Bull's head l.

Rev.—Incuse square quartered.

Uncertain. [Pl. XI. 54]. El. 5. (Bank collection.)

55. *Obv.*—Cock's head l.

Rev.—Incuse square.

Uncertain. [Pl. XI. 55]. El. 4·5. (Lawson.)

56. *Obv.*—Horse's head r.

Rev.—Incuse square quartered.

Uncertain. [Pl. XI. 56]. El. 5·2. (Whittall.)

NINETY-SIXTH, 2·5 grs.

57. *Obv.*—Griffin's head l.

Rev.—Incuse square.

Teos? [Pl. XI. 57]. El. 2·2. (Lawson.)

STATERS OF CYZICUS, 254—247 grs.

58. *Obv.*—Upper part of Gaia rising from the soil, clad in chiton which trails behind her; she holds up before her the infant Erichthonios, who stretches out his arms before him. Beneath, tunny.

Rev.—Quadripartite incuse square of "mill-sail" pattern. [Pl. XI. 58]. El. 247·5. (Whittall.)

This extremely interesting type seems to have been copied from or suggested by a sculptured group, of which Athena formed a part, as the child is evidently stretching out his arms towards some personage before him. There is in the Berlin Museum an Attic terra-cotta relief (*Arch. Zeit.*, N. F. V. Taf., 63), which is the best and most characteristic extant representation of the birth of Erichthonios. The subject was probably a popular one, especially in Attica, in the fifth century B.C., and the stater now before us shows the central portion of a similar group, which we may suppose to have been in the mind of the engraver of the die of this coin. On the right would have been the figure of Athena advancing to receive the child, and on the left, behind Gaia, that of Kekrops, half man and half serpent, as on the Berlin terra-cotta, but facing the other way. The occurrence of this same figure of Kekrops on another Cyzicene stater (*Brit. Mus. Guide*, Pl. X. 14), would almost warrant us in inferring that there existed at Cyzicus a group representing the birth of Erichthonios, which was utilised by the artist, who has made two coin-types out of it.

For fuller details see Canon Greenwell's article above referred to, p. 64, *supra*.

59. *Obv.*—Head of Athena l., of archaic style, wearing Corinthian helmet without crest. Her hair is indicated after the archaic manner by dots. Behind, tunny.

Rev.—Quadripartite incuse square of "mill-sail" pattern.

[Pl. XI. 59]. El. 249·6. (Lambros.)

60. *Obv.*—Head of Athena l., of archaic style, wearing close-fitting Attic helmet, with tall crest. Beneath, tunny.

Rev.—Similar.

[Pl. XI. 60]. El. 247. (Lambros.)

These two coins are extremely early examples of the Cyzicene stater. I am inclined to assign them to an earlier date than B.C. 478, the year which I have elsewhere, and on historical grounds, pointed out as probably the date of the commencement of this series of staters.

61. *Obv.*—Chimaera recumbent l. on tunny fish. Style, archaic.

Rev.—Quadripartite incuse square of "mill-sail" pattern.

[Pl. XI. 61]. El. 254·1. (Lawson.)

62. *Obv.*—Forepart of lion l. devouring prey.

Rev.—Similar.

[Pl. XI. 62]. El. 247·8. (Subbi.)

63. *Obv.*—Lion seated l., with open jaws, and r. fore-paw raised. Beneath, tunny.

Rev.—Similar.

[Pl. XI. 63]. El. 246·3. (Bank collection.)

64. *Obv.*—Forepart of cock l. on tunny.

Rev.—Similar.

[Pl. XI. 64]. El. 248·2. (Subbi.)

65. *Obv.*—Forepart of winged crested boar l. Beneath, tunny.

Rev.—Similar.

[Pl. XI. 65]. El. 247·8. (Subhi.)

66. *Obv.*—Forepart of sphinx l, with fore-paw raised. Beneath, tunny.

Rev.—Similar.

[Pl. XI. 66]. El. 248·6. (Subhi.)

67. *Obv.*—Forepart of griffin l, with fore-paw raised. In front, tunny.

Rev.—Similar.

[Pl. XI. 67]. El. 250. (Subhi.)

HECTAE OF CYZICUS. 42 grs.

68. *Obv.*—Dolphin l. Beneath, tunny.

Rev.—Quadripartite incuse square.

[Pl. XI. 68]. El. 41·6. (Subhi.)

69. *Obv.*—Head of large fish l. Above, tunny l.

Rev.—Similar.

[Pl. XI. 69]. El. 41·5. (Subhi.)

TWELFTHS OF CYZICUS. 21 grs.

70. *Obv.*—Archaic bearded head with long straight hair indicated by dots. Beneath, tunny.

Rev.—Quadripartite incuse square.

[Pl. XI. 70]. El. 19·7. (Whittall.)

71. *Obv.*—Tail of tunny in linear circle.

Rev.—Similar.

[Pl. XI. 71]. El. 20·7. (Whittall.)

72. *Obv.*—Dolphin l. Above, tunny l.

Rev.—Similar.

[Pl. XI. 72]. El. 20·7. (Bank collection.)

HECTAE OF PHOCAEA. 40 grs.

(Class i.)

73. *Obv.*—Seal, l. Beneath, another small seal as mint mark.

Rev.—Quadripartite incuse square.

[Pl. XI. 73]. El. 38·7. (Bank collection.)

74. *Obv.*—Head of calf l. In front, small seal.

Rev.—Similar.

[Pl. XI. 74]. El. 39·8. (Bank collection.)

(Class ii.)

75. *Obv.*—Female head l., of fine early transitional style, wearing round earring, necklace, and hair in sphendone. Behind, seal.

Rev.—Quadripartite incuse square.

[Pl. XI. 75]. El. 39·4. (Bank collection.)

76. *Obv.*—Female head l., of fine style, wearing long earring, and hair in saccos, with ornamental border, and fringe at back. Beneath, seal.

Rev.—Similar.

[Pl. XI. 76]. El. 39·6. (Whittall.)

77. *Obv.*—Female head l., wearing Phrygian cap. Behind, seal.

Rev.—Similar.

[Pl. XI. 77]. El. 38·7. (Bank collection.)

78. *Obv.*—Female head l., of softer and finer style than the last, wearing Phrygian cap confined with band tied behind head. Seal not visible.

Rev.—Similar.

[Pl. XI. 78]. El. 39·4. (Bank collection.)

79. *Obv.*—Female head l., of soft, fine style, wearing long earring, and with hair gathered up into a knot behind, and confined with band passing thrice round it. Beneath, seal.

Rev.—Similar.

[Pl. XI. 79]. El. 39·0. (Bank collection.)

80. *Obv.*—Female (?) head l., of fine style, with short bull's or cow's horn, from which hangs a fillet; hair rolled over diadem, and with ends loose. Beneath, seal.

Rev.—Similar.

[Pl. XI. 80]. El. 39·7. (Bank collection.)

81. *Obv.*—Female head l., of fine style, wearing long earring; hair rolled. Behind, seal.

Rev.—Similar.

[Pl. XI. 81]. El. 39·1. (Bank collection.)

HECTÆ OF LESBOS (?). 40 grs.

(Class i.)

82. *Obv.*—Fore-part of bull l., in front **M**.

Rev.—Incuse lion's head l., behind which is a small oblong incuse.

[Pl. XI. 82]. El. 39·7. (Bank collection.)

The **M** on this coin probably stands for Mytilene.

83. *Obv.*—Ram's head r., beneath which, cock l.

Rev.—Incuse bull's head, l.

[Pl. XI. 83]. El. 39·4. (Bank collection.)

(Class ii.)

84. *Obv.*—Young male head r., bound with tænia.

Rev.—Incuse square containing crested Corinthian helmet r., and **Ξ** (**M**?).

[Pl. XI. 84]. El. 38·4. (Bank collection.)

85. *Obv.*—Female head r., wearing wreath, apparently of olive.

Rev.—Incuse square containing dotted square, within which head and neck of griffin.

[Pl. XI. 85]. El. 39.9. (Bank collection.)

(Class iii.)

86. *Obv.*—Head of Zeus (?) r., laureate.

Rev.—Linear square, within which trident.

[Pl. XI. 86]. El. 39.3. (Bank collection.)

87. *Obv.*—Head of bearded Dionysos r., of archaistic style, bound with taenia and with ivy.

Rev.—Incuse square, within which linear square containing female head r. wearing calathos.

[Pl. XI. 87]. El. 39.1. (Bank collection.)

88. *Obv.*—Head of Athena r., wearing crested Athenian helmet.

Rev.—Incuse square, within which linear square containing young male head r. with short hair, wearing ampyx.

[Pl. XI. 88]. El. 39.1. (Bank collection.)

STATERS OF LAMPSACUS. 237 grs.

89. *Obv.*—Fore-part of winged horse l. Above, symbol, amphora.

Rev.—Quadripartite incuse square.

[Pl. XI. 89]. El. 232.2. (Whittall.)

90. *Obv.*—Forepart of winged horse l., the whole in a vine wreath.

Rev.—Quadripartite incuse square, of which two alternate quarters are shallow, and the other two deeply incuse.

[Pl. XI. 90]. El. 237. (Sava.)

Both these staters are earlier in style than the staters of similar type described by me in *Num. Chron.*, 1876, Pl. VIII. 31.

II.—COMPOSITION OF EARLY ELECTRUM COINS CALCULATED FROM THEIR SPECIFIC GRAVITIES.

BEFORE bringing this paper to a conclusion there is one very important question which must not be altogether passed over. I allude to the quality of the metal of which the early electrum coins are composed.

It seems that this can hardly be ascertained with absolute accuracy without subjecting the coins to a chemical analysis. If we were sure that electrum coins contained only gold and silver thoroughly fused, and that the whole mass was compact throughout, not porous or spongy in any part, then indeed it would be possible to determine the exact proportions of gold and silver contained in each specimen by means of its specific gravity. Unfortunately, however, this is not the case. The few specimens which have been analysed betray the presence in small quantities of a third metal in addition to gold and silver.

The late Dr. Brandis had a $\frac{1}{2}$ stater of Miletus analysed with the following results—

Obv.—Lion's head with star over forehead.

Rev.—Incuse. Weight 18 grs.

\mathcal{N} 53·5, \mathcal{R} 43·8, \mathcal{A} 2·6 per cent.

The colour of this coin was pale and silvery. It will be seen that it contains more gold and less silver than is indicated by the specific gravities of the four specimens of the same coinage, Nos. 27—30, in the following list.

The Duc de Luynes also had two Lesbian hectæ analysed :

Obv.—Lion's head.

Rev.—Calf's head incuse (Sestini, *Stat. Ant.* iv. 9—14).
Weight 39 grs.

N 41·33, *R* 51·00, *Æ* 7·67 per cent.

Obv.—Head of Apollo.

Rev.—Head of youth with long hair (Sestini, *Stat. Ant.* vii. 15). Weight 39 grs.

N 41·167, *R* 53·940, *Æ* 4·893 per cent.

Dr. J. Brandis had a third specimen analysed.

Obv.—Female head.

Rev.—Lyre (Sestini, *op. cit.* vii. 17). Weight 38 grs.

N 39·50, *R* 48·90, *Æ* 11·60 per cent.

It is true that these three last-mentioned coins are of a later period than those which I am now discussing; but are we justified in assuming that the majority of the earlier electrum coins are free from any alloy of copper? Probably not; and if copper be present, even in small quantities, it will necessarily, as it is lighter than silver, modify the specific gravity, which will consequently be lighter to a greater or less extent than it would be if the coin were composed of gold and silver only. As, however, it is not to be expected that collectors and museums will allow their coins to be filed, or otherwise injured, in the interests of science, we must content ourselves with the evidence afforded by specific gravities. And yet much information may be derived from carefully taken specific gravities of electrum coins, due allowance being always

made for the fact that these specific gravities are, or at least may be, lighter than they would be if the coins were a simple mixture of gold and silver for the reasons above stated.

Generally speaking we may perhaps assume that the percentage of silver indicated by the specific gravity of most of the pale-coloured electrum coins is slightly in excess of what it is in reality, and the gold contents slightly lower. Hence a coin of which the specific gravity is 12·83, and which should theoretically contain 40 per cent. of gold and 60 per cent. of silver, might, if analysed, be found to contain perhaps as much as 44 per cent. of gold and somewhat less than 56 per cent. of silver plus a little copper. Whether the difference between the actual and the theoretical specific gravity is due entirely to the presence of copper, or whether it is partly to be accounted for by the fact that gold and silver contract to some extent in combining, I am not capable of deciding, but the probability is that any slight contraction which may take place, and which would raise the specific gravity, is more than compensated for by the copper alloy which lowers it again.

I am informed by Mr. Petrie, who has bestowed some attention upon this subject, that chemists assert that the presence of 30 per cent. of silver in a mixture of gold and silver is enough to constitute what is technically called "green gold." If this be a fact, which I rather doubt, any electrum coin which is fairly yellow in colour, ought to contain more than 70 per cent. of pure gold, unless indeed the yellow tint is produced by the addition of a larger quantity of copper than is usually present in electrum coins.

Having thus put the reader on his guard it will be instructive to take note of the specific gravities of a

number of early electrum coins which I have carefully taken by means of a balance accurate to the $\frac{1}{100}$ part of a grain, kindly lent for the purpose by Mr. Chaney, the Warden of the Standards.

In all cases the gold percentage is doubtless a little higher and the silver lower than the figures indicate, but it is reasonable to suppose that the specific gravities here given furnish, on the whole, an accurate test of the comparative fineness of the metal of the specimens which I have weighed.

It will be seen that colour is not such a very bad rough test of quality after all, for we get the following results.

The figures show the percentage of gold indicated by the specific gravity. In one instance the metal has been so condensed as to be 4 per cent. above the normal gravity.

Gold.

104, 98, 84 per cent.

Electrum.

- (a) Dark or rich yellow, 72, 70, 68, 64, 60, 55 per cent.
- (b) Yellow, 68, 59, 56, 53, 51, 50, 49, 48, 45, 44, 43, 36 per cent.
- (c) Pale yellow, 43, 40, 36, 35, 33, 31, 29, 21, 20 per cent.
- (d) Very pale yellow, 33, 31, 20, 14, 10 per cent.
- (e) Extra pale yellow, 30, 5 per cent.

It is true that there is sometimes a great difference in the fineness of coins which are almost identical in colour, weight, and style, and which are certainly contemporary issues, but it may be safely asserted that no pale tinted coins contain as much as 50 per cent. of pure gold, and no dark yellow coins as little as 50 per cent.

It is remarkable that there are very few coins which approach in fineness the quality of the electrum slabs or bricks which Croesus ordered to be fabricated to support the Lion of pure gold which he dedicated at Delphi

(Herod. i. 50). This Lion, which weighed 10 gold talents, rested upon four oblong bricks, also of pure gold (size 6 palms by 3, and 1 palm in thickness), each weighing $2\frac{1}{2}$ talents. These doubtless formed the top step of a plinth or pedestal of four gradations. The topmost stage consisted of the four gold bricks, the next stage of $3 \times 5 = 15$ electrum bricks; the third stage of $5 \times 7 = 35$ electrum bricks; the lowest stage of $7 \times 9 = 63$ electrum bricks. Total 4 gold bricks, each $2\frac{1}{2}$ talents in weight, and 113 electrum bricks, each 2 talents in weight, but corresponding in size with the gold bricks.

It has been calculated that these electrum 2 talent bricks, in order to be of the same size as the gold $2\frac{1}{2}$ talent bricks, must have been composed of an alloy consisting of about 73 per cent. of gold, and 27 per cent. of silver.

The total metal value of the Lion and pedestal must have exceeded half a million pounds sterling.³

Those who would pursue this question further must have recourse to Dr. K. B. Hofmann's valuable article in the *Numismatische Zeitschrift* for 1884, where full details are given with regard to the errors which may arise, and the allowances which must be made for weight of air, temperature of water, contraction of metals in combination, &c.

I will only add here, for the information of the unscientific reader, that the specific gravity of a coin is obtained by weighing the coin in a balance of great precision first of all in air and then, suspended by a fine platinum wire, in distilled water of the temperature of 60 degrees Fahrenheit. The specific gravity is next arrived at by dividing the weight of the coin in air by the difference between its air-weight and its water-weight.

³ Hultsch, *Griech. u. Röm. Metrologie*, p. 579.

Thus the coin No. 16, in the following list, weighs in air 109·05 grs., in water 102·05, the difference is 7. The specific gravity is consequently $\frac{109\cdot05}{7}$ or 15·57.

From this we obtain the gold contents by the following formula, which I take from Dr. Hofmann's paper.

$$\text{Gold per cent.} = \frac{219\cdot1 (\sigma - 10\cdot48)}{\sigma}$$

Here σ stands for the specific gravity of the coin; 10·48 is the specific gravity of silver.

Therefore $\frac{219\cdot1 (15\cdot57 - 10\cdot48)}{15\cdot57} = 71\cdot62$ per cent. of gold.

The coin may therefore be said to contain nearly 72 per cent. of gold, and a little over 28 per cent. of silver.

As minute accuracy is impossible I have not thought it necessary as a rule to set down the decimals in the column of percentages.

GOLD.

	Weight in air.	Weight in water.	Differ- ence.	Sp. gr.	A ^v p. c.	Alloy p. c.
1. Gold stater of Croesus [<i>B.M. Guide</i> , Pl. I. 13.] (Rich dark yellow.)	124·20	118·02	6·18	20·09	104·8	0

The specific gravity of this coin is higher than that of 24 carat gold, which is 19·28.

2. Gold Daric (Rich dark yellow.)	128·28	121·56	6·72	19·09	98·8	1·2
3. English sovereign (Coppery yellow.)	123·25	116·0	7·25	17·00	84·03	15·97

The standard weight of the sovereign is 123·27 grs., and it contains 91·66 per cent. of pure gold, and 8·34 per cent. of alloy; but the above figures would be correct if the alloy were composed of silver.

SILVER.

4. Attic tetradrachm	264·25	239·08	25·17	10·49	0	106
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It would seem that this coin contains a trace of gold, as its specific gravity is higher than that of pure silver, which is 10·48.

ELECTRUM.

BABYLONIC STANDARD.

	Weight in air.	Weight in water.	Differ- ence.	Sp. gr.	N p. c.	AR p. c.
1. Striated stater [<i>B.M. Guide</i> , Pl. I. 1.] (Pale yellow.)	166·87	151·10	15·77	10·58	2	98

From the specific gravity of this remarkable coin it would appear that it consists almost entirely of silver, but from its yellow tint as compared with a pure silver coin, such as a tetradrachm of Athens, it is certain that it must contain a larger proportion of gold than is here indicated, but the yellow colour is produced doubtless chiefly by the addition of copper.

Such an alloy being lighter than silver, would affect a calculation based upon the assumption that the coin consists of gold and silver only.

PHOENICIAN STANDARD.

Staters (a) earlier.

	Weight in air.	Weight in water.	Differ- ence.	Sp. gr.	N p. c.	AR p. c.
2. Two lions' heads, back to back [Pl. X. 1.] (Yellow.)	219·50	203·50	16	13·66	51	49
3. Forepart of lion [<i>B.M. Guide</i> , Pl. I. 6.] (Yellow.)	217·84	201·28	16·56	13·15	44·5	55·5
4. Lion recumbent, looking back (Pale yellow.)	215·40	198·66	16·74	12·83	40	60
5. Similar type in oblong frame [Pl. X. 2.] (Very pale yellow.)	214·90	197·87	17·03	12·62	38	62
6. Stag with name of Phanes [<i>B.M. Guide</i> , Pl. I. 7.] (Pale yellow.)	216·50	199·30	17·20	12·58	36	64

Staters (β) later.

	Weight in air.	Weight in water.	Differ- ence.	Sp. gr.	<i>N</i> p. c.	<i>R</i> p. c.
7. Cock [Pl. X. 3.] (Pale yellow.)	215·79	198·98	16·81	12·84	40	60
8. Horse [Pl. X. 4.] (Very pale yellow.)	215·17	196·53	18·64	11·54	20	80
9. Sow [Pl. X. 5.] (Very pale yellow.)	216·12	199·14	16·98	12·73	38	62
10. Half-winged boar [Pl. X. 6.] (Very pale yellow.)	217·37	200·30	17·07	12·73	38	62
11. Sphinx seated [<i>B.M. Guide</i> , Pl. I. 8.] (Pale yellow.)	216·97	199·03	17·94	12·09	29	71
12. Forepart of bull, looking back [<i>B.M. Guide</i> , Pl. I. 9.] (Pale yellow.)	216·72	198·03	18·69	11·59	21	79
13. Eagle on hare [Pl. X. 7.] (Pale yellow.)	217·52	199·48	18·04	12·06	29	71
14. Forepart of winged horse [Pl. X. 8.] (Very pale yellow.)	215·72	198·13	17·59	12·26	31·5	68·5

Half-staters (α) early.

	Weight in air.	Weight in water.	Differ- ence.	Sp. gr.	<i>N</i> p. c.	<i>R</i> p. c.
15. Lion recumbent, looking back, in oblong frame. Type of stater No. 5 [<i>Num. Chron.</i> , 1875, Pl. VIII. 4.] (Pale yellow.)	106·73	98·08	8·65	12·34	33	67
16. Stellate flower [Pl. X. 9.] (Rich yellow.)	109·05	102·05	7·00	15·57	72	28
17. Three silphium flowers on boss [Pl. X. 10.] (Rich yellow.)	109·49	102·40	7·09	15·44	70	30
18. Striated half-stater [<i>Num. Chron.</i> , 1875, Pl. VIII. 1.] (Pale brownish yellow.)	105·74	97·08	8·66	12·21	31	69
19. Raised rough square [<i>Num. Chron.</i> , 1875, Pl. VIII. 2.] (Rich yellow.)	109·94	102·83	7·11	15·46	70	30
20. Raised circle, or shield, diagonally divided [<i>Num. Chron.</i> , 1875, Pl. VIII. 3.] (Rich yellow.)	108·37	101·25	7·12	15·22	68	32
21. Ornamented square within frame [Plate X. 11.] (Yellow.)	108·42	101·28	7·14	15·18	68	32

Thirds (a) early.

	Weight in air.	Weight in water.	Differ- ence.	Sp. gr.	<i>N</i> p. c.	<i>AR</i> p. c.
22. Ruised square, quartered . . . [<i>Num. Chron.</i> , 1875, Pl. VIII. 5.] (Very pale yellow.)	70.28	63.88	6.40	10.98	10	90
23. Cock and hen [<i>Num. Chron.</i> , 1875, Pl. VIII. 8.] (Yellow.)	73.02	67.18	5.84	12.50	35	65
24. Bee [<i>Num. Chron.</i> , 1875, Pl. VIII. 6.] (Very pale yellow.)	71.24	64.88	6.36	11.20	14	86
25. Bee [<i>Num. Chron.</i> , 1875, Pl. VIII. 7.] (Silver, with slight yellow tint.)	67.54	61.23	6.31	10.70	5	95
26. Lion's head with star on forehead [Pl. X. 12.] (Yellow.)	72.89	67.08	5.81	12.55	36	64
27. Similar (Yellow.)	72.75	67.48	5.27	13.80	53	47
28. Similar (Yellow.)	72.72	67.13	5.59	13.00	43	57
29. Similar (Yellow.)	71.34	66.08	5.26	13.56	50	50
30. Similar [Rollin & Feuardent.] (Pale yellow.)	72.06	66.58	5.48	13.10	43.8	56.2

EUBOIC STANDARD.

Staters.

	Weight in air.	Weight in water.	Differ- ence.	Sp. gr.	<i>N</i> p. c.	<i>AR</i> p. c.
31. Lion's scalp, facing [<i>Num Chron.</i> , 1875., Pl. IX. 4.] (Yellow.)	133.34	123.45	9.89	13.48	48	52
32. Gorgon head, facing [Pl. X. 34.] (Extremely pale yellow.)	123.46	113.28	10.18	12.12	30	70

Half-stater.

33. Lion's scalp, facing [<i>Num. Chron.</i> , 1875, Pl. IX. 5.] (Rich yellow.)	66.09	61.38	4.71	14.00	55	45
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Thirds.

34. Eagle on hare ? [Pl. X. 36.] (Yellow.)	44.32	41.03	3.29	13.47	49	51
35. Swastica [Pl. X. 38.] (Yellow.)	45.83	42.48	3.35	13.65	51	49

Sixths.

	Weight in air.	Weight in water.	Differ- ence.	Sp. gr.	N p. c.	A p. c.
36. Eagle flying [<i>Num. Chron.</i> , 1875, Pl. IX. 8.] (Yellow.)	22.15	20.56	1.57	14.11	56	44
37. Wheel [<i>Num. Chron.</i> , 1875, Pl. IX. 7.] (Rich yellow.)	21.79	20.28	1.51	14.43	60	40
38. Wheel [Pl. X. 39.] (Yellow.)	20.59	19.03	1.56	13.20	45	55

PHOCAIC STANDARD.

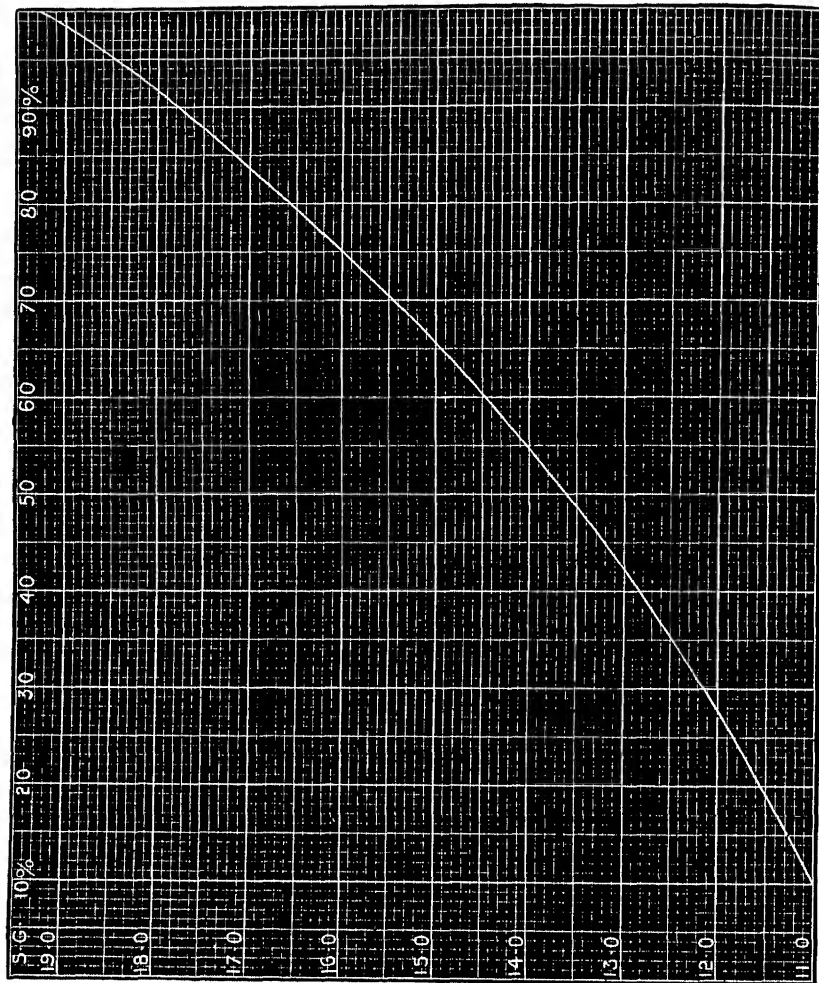
Staters.

39. Lion's head with open jaws [<i>Num. Chron.</i> , 1875, Pl. X. 8.] (Yellow.)	248.27	230.98	17.29	14.36	59	41
40. Tunny placed on fillet [<i>Num. Chron.</i> , 1875, Pl. X. 7.] (Yellow.)	252.98	235.32	17.66	14.32	59	41
41. Chimaera [<i>Num. Chron.</i> , 1875, Pl. X. 9.] (Yellow.)	252.60	234.14	18.46	13.67	51	49
42. Centaur carrying off nymph [<i>Num. Chron.</i> , 1875, Pl. X. 11.] (Rich yellow.)	252.50	235.48	17.02	14.83	64	36

As the specific gravities of numerous staters and hectae of Cyzicus have already been calculated by Dr. Hofmann in the article above referred to, by Dr. Hultsch, *Zeit. f. Num.* xi. 165, and still more recently by Prof. P. Gardner, in the pages of the *Numismatic Chronicle* (*supra*, p. 188). I have not added any of these to my list.

I am indebted to Mr. W. M. Flinders Petrie for suggesting to me the following table, which shows the theoretic curve of mixtures of gold and silver by calculation. By means of this table, the specific gravity having first been ascertained, it is easy to read off the percentage of gold contained in the mixture, presuming that the examples selected are fused, and that they contain gold and silver only.

TABLE OF PERCENTAGE OF PURE GOLD CONTAINED IN FUSED MIXTURES OF GOLD AND SILVER.



EXAMPLE.

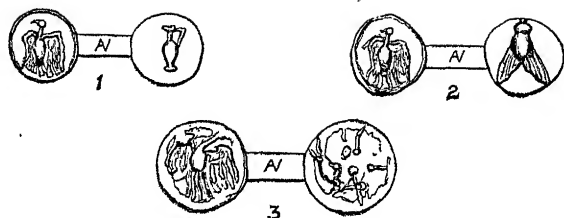
Coin No. 2, p. 304
(Pl. X. 1) of which
the S. G. is 13.66,
contains 51 per
cent. of pure gold.

NOTE.

S. G. of pure silver
is 10.48.

S. G. of pure gold is
19.28.

S. G. of electrum
ranges between
these two.



XIV.

NOTE ON THREE GOLD COINS FROM CRETE.

I FIND from my private Journal of June 5, 1853, that when exploring the site of Polyrrhenium, near the west end of Crete, I procured two small gold coins from a peasant living in one of the three or four houses forming the hamlet of Ligouria, situated on the northern slope of the hill upon which Polyrrhenium was situated, and nearly a mile from its acropolis.

This peasant from whom I had obtained some pottery, as well as some silver and copper coins of the city, after consulting with his wife, produced the two gold coins also, as I seemed to be a ready purchaser of antiques, and not likely to compromise him with the Turkish authorities.

These coins, with some others in silver, he obtained from an ancient tomb on his land, to the south of, and a little above the hamlet, where they often fell in with interments when cultivating the spot. But the greatest secrecy was necessary in opening the tombs to prevent its being known to the Turkish authorities.

The third gold coin, which is the largest of the three, was brought to me a few weeks afterwards, to my house at Khaleppa, near Khania, where I was living during the stay of my ship in Suda Bay, whilst the survey of the western part of the island was in progress; and I was led

to believe that it was also found at Polyrrhenium by the peasant who brought it, and who evidently knew of my having bought the other two there.

The three coins certainly have a common character, from their being so remarkably thin, their small size, and from having a bird in flight on the obverse of each of the three. There is, however, a marked difference between the largest of the three and the two I first procured from the site of Polyrrhenium.

These two gold coins weigh $10\frac{1}{2}$ grains each, roughly, they are evidently from the same mint and locality, for the birds in flight on each of the obverse and concave surfaces of these coins are so identical that it seems as if they were struck with the same die. Their reverse sides, however, which are flat, have an *œnochoë* on one of them (Fig. 1), and a bee on the other (Fig. 2), and seem as perfect as when first struck.

Thus the bird in flight to the left on all three coins seems to indicate a monetary alliance. Now the only city in Crete whose coins represented a similar bird in flight was Lyttus, between which and Polyrrhenium there was an alliance, as we know, before Lyttus was surprised and destroyed by the Cnossians. From this destruction it never recovered; and the remnant of the inhabitants who had escaped slaughter took refuge with the Lappeans in the central and western part of Crete, with whom they were in alliance.

The third and largest of the three coins weighs $12\frac{1}{2}$ grains, roughly taken, and evidently belonged to a city and mint where the art was ruder than in the case of the two coins procured at, and most probably struck at, Polyrrhenium.

Although the three coins have a bird in flight on the

obverses, and thus suggest that they were struck to mark some common cultus, yet the third differs so much in type, as well as in size and weight, from the other two, that it was no doubt struck at some different city, where the art was ruder.

As the flying bird on the obverse of this coin more resembles an eagle in flight, as on coins of Lyttus, than do the birds upon the other, it may have been struck at that city. The coins of Lyttus are, as a rule, of ruder work than those of Polyrrhenium; and this may be accounted for by the situation, which precluded it from easy communication with Greece, and thus tended to limit the advance of its artistic skill. But there are other peculiarities on the coin that require to be noticed.

As its reverse side seems at first sight to have only four rays of a star upon it, radiating from, but not in contact with, a central boss, it has somewhat the appearance of those early coins that have an incuse square upon them, and produces the impression of being of an earlier time than rightly belongs to it. But on examining it closely it is seen that it shows a blur upon it, that nearly obliterates the fifth ray. This blur I was at first inclined to take for a counter-mark, from its likeness to a bird with a long neck standing upon something, with the wings apparently closed. Such a counter-mark no doubt might have been placed upon it by some neighbour city to that which struck the coin.

A closer examination has, however, convinced me that the bird-like object is not a counter-mark, but merely the result of a defect in the die or in the striking of this particular specimen.

T. SPRATT,
VICE-ADMIRAL.

XV.

DISCOVERY OF A HOARD OF ROMAN COINS AT SPRINGHEAD.

SPRINGHEAD, near Gravesend, has for some time been known as the site of Roman remains ; and it has supplied, among numerous Roman coins, some new British types of a late period, engraved and described in Dr. Evans's *Coins of the Ancient Britons*.

The site is that of an extensive *mansio* or *mutatio*, recorded in the second Iter of the Itinerary of Antoninus as *Vagniacæ*, nine miles from *Durobrivis*, Rochester, and eighteen from *Noviomagus*, towards *Londinium*. The foundations of walls two feet or more thick, contribute to show the importance of the station. These walls can be traced, in dry seasons, by the parched corn and herbage in the corn-fields, which mark them clearly, affording a tempting inducement for excavating to any earnest and wealthy explorer. A little beyond the limits of the Roman station, sepulchral interments have been discovered from time to time. Among these was one of an unusually rich and interesting character, found in 1801, and recorded by the Rev. Peter Rashleigh in the *Archæologia*. In addition to what I have published in the *Collectanea Antiqua*,¹ the late Mr. Silvester informed me that nearly half a ton of horse-

¹ Vol. i., p. 110, and Plates XL. and XLI.

shoes had been dug up, near the head of the spring, (which gives name to the place,) not far from the foundations of a Roman house. These horse-shoes, from a few shown to me, were unquestionably Roman. They may have been forged upon the spot, or brought there for public and private service.

As some of my readers may be induced to explore the district, I may mention that the Roman road, popularly called Watling Street, runs in a direct line from Dover to London, passing by Springhead, where it is destroyed, into Swanscombe wood, where it was well preserved a few years since, and through the town of Dartford. In the High Street it was, not long since, laid open, and then noticed by Mr. John Harris, of Belvedere, who describes it as paved with boulders, at about three feet below the present surface. At the upper part of Strood it took a slight curve to the left, keeping on the southern side of a British trackway which, called "the old road," leads to Springhead, by Cobham Park and Singlewell; and, it may be inferred, on to London. The Roman *via* accompanied it on the high ground on the south. Though, in the open fields it has been ploughed down, it is very perceptible in Cobham Park. It was necessary for the Romans to have a high and dry transit, especially in the winter when the British trackway would be often choked up with snow. This adaptation of the British lines of traffic must have been general. I noticed it in walking, a few years since, with Messrs. Harris and Law, along the Roman road from Ewell to Chichester.

The hoard of coins, the chief object of these notes, was recently found at Springhead, and is in number 114. It extends from Gordianus the Third to Tetricus Junior, chiefly in billon.

	Number.
GORDIANUS III., <i>rev.</i> titles	1
PHILIPPUS, <i>rev.</i> titles	1
TRAJANUS DECIUS, MERITAS (<i>sic</i>) <i>Veritas</i> ?	1
VALERIANUS, <i>rev.</i> titles, FELICITAS AVG.	1
GALLIENUS, 4 in billon, 3 in small brass	7
SALONINA, <i>rev.</i> VENVS FELIX.—DEAE SEGETIÆ	2
VICTORINUS, 6 varieties	23

One is remarkable for the double V in what is usually *Piavonius*: IMP. C.M. PIAVVONIVS VICTORINVS P.F. AVG. *Rev.* FIDES MILITVM. A female figure holding two standards.

MARIUS, <i>rev.</i> SAEC. FELICITAS	1
POSTUMUS, <i>rev.</i> SALVS PROVINCIARUM	1
„ „ SALVS AVG.	1
„ „ FORTVNA AVG.	2
„ „ FELICITAS AVG.	2
„ „ VICTORIA AVG.	2
„ „ PAX AVG.	3
„ „ SAECULI FELICITAS	2
„ „ P. M. TR. P. COS. II. P. P.	9
„ „ VBERITAS AVG.	1
„ „ HERC. DEVSONIENSI	13
„ „ MONETA AVG.	13
„ „ PROVIDENTIA AVG.	8
„ „ LAETITIA AVG. (a galley)	1
„ „ HERC. PACIFERO	4
„ „ FIDES MILITVM	2
„ „ SERAPI COMITI AVG.	2
„ „ VIRTVS AVG.	2

These are mostly in a fine state of preservation.

In small brass.

Pax AVG., 3; FIDES MILITVM, 1; ORIENS AVG., 1;	
VIRTVS EQVIT, 1; IOVI VICTORI, 1	7
TETRICUS JUNIOR, in small brass	2
Total	<u>114</u>

Like many more hoards this points to the eventful time when Tetricus gathered together his troops and recruits in Britain to pass over to Gaul to oppose the legions of the Emperor Aurelianus.

To the courtesy of Mr. Samuel Joseph West, of Gravesend, I am indebted for an examination of these coins upon my own table.

C. ROACH SMITH.

December 13th, 1887.

[Since writing the above I learn that these coins are now the property of G. M. Arnold, Esq., of Milton Hall, near Gravesend, who possesses a good collection of local and general antiquities.]

XVI.

GROATS OF THE SECOND COINAGE OF HENRY VII.

THE different varieties of Henry VII.'s groats with the arched crown are well described in Hawkins's *Silver Coins of England*, but apparently neither author nor editor has attempted to arrange them in the order in which they were issued. Referring to certain groats with the crown of plain double arches, Mr. Kenyon admits that the Hounslow find tends to prove that this type "probably preceded that with the single arch;" yet, in the last edition of the standard work edited by him, two groats with the single-arched crown are placed in the midst of the series with the double-arched crown.

Now, it is extremely unlikely that, after the crown with a single arch had been introduced, it should have been discontinued for a time, and again adopted on the third coinage of Henry VII. Setting aside, then, such an arbitrary arrangement as that, we may hope, by endeavouring to trace the gradual development of this series of coins, if not to discover their true order, at least to make a step towards so doing.

Probably most numismatists who have given any attention to this group of coins would fix on one of the groats with cross in saltire at each side of neck, to be placed first; and they would hardly dispute that the groat with

m.m. cross-crosslet should be placed last of the second issue. But it is scarcely likely that they would also agree as to the order of all the intermediate varieties.

Let us, however, take the two groats above mentioned, and contrast their points of difference, that the comparison may guide us in arranging the other coins.

The groat with a cross in saltire at each side of the neck is found without any m.m. (Fig. 2), with m.m. trefoil on the reverse only, and with m.m. trefoil on both sides (B.M.). This groat has a crown of plain double arches, surmounted by small orb and plain cross. The king's hair is bushy, and a lock stands straight out just under the crown, as on the groats of the first coinage, with a cross in saltire at each side of the neck. There is a small tréfoil on the king's breast, and trefoils are used for stops. The peculiarities of this groat connect it closely with those of the first coinage (Fig. 1); but the type must soon have been changed, as the groat of the second coinage with a cross in saltire at each side of the neck is rare, and none bearing this mark in the field were found at Hounslow.

The groat with m.m. cross-crosslet (Fig. 9) should be placed last, as this m.m. was continued into the third coinage. That the cross-crosslet should rank first among the mint marks of the third coinage is proved by the existence of the peculiar side-faced groat bearing this m.m., which differs from the rest in having a tressure round the king's head, as on the full-faced groats with the arched crown (Fig. 10). The groat of the second coinage with m.m. cross-crosslet is of small size. The crown has only a single arch, ornamented on each side by two crockets of peculiar shape. The orb surmounting the crown is large, and the cross at the top has concave ends,

The king's hair, instead of being bushy, is long and wavy. The cusp of the tressure on the king's breast is fleured. Small crosses are used for stops. Although groats with this m.m. are common, there were none in the Bury St. Edmund's find, which was evidently deposited before groats bearing this m.m. were issued.

The comparison of these two types of groats suggests the following general rules for determining the order of this series.—

- (i.) The double-arched crown preceded the single-arched crown.
- (ii.) The crown with plain arches is earlier than that with ornamented arches.
- (iii.) The bust with bushy hair is earlier than the bust with long wavy hair.

But the fulness or abbreviation of the legend affords no clue as to order of date; for although most of the earlier groats read $\pi\alpha\epsilon\lambda \times Z \times \text{FR}\pi\alpha\alpha$, and on the reverse, $\text{D}\epsilon\text{V}\Omega \text{M}\epsilon\text{V}\Omega$, whilst many of the later groats read only $\pi\epsilon\text{L} \times Z \times \text{FR}$, and on the reverse, $\text{D}\epsilon\text{V}' \Omega\epsilon\text{V}'$, the legend has not been uniformly and gradually shortened. For instance, we find some groats with m.m. escallop read $\pi\alpha\epsilon\text{L} \times Z \times \text{FR}\pi\alpha\alpha$, and on the reverse, $\Omega\epsilon\text{V}\Omega$; whilst the reading $\text{D}\epsilon\text{V}\Omega$ had not entirely gone out of use when the m.m. greyhound's head was employed.

However, adopting the above-mentioned rules, the groats would succeed each other in the following order:—

I. Groat with a cross in saltire at each side of the neck. *No m.m., or with m.m. trefoil.* This variety has been fully described above.

II. *The Portcullis pattern groat.*

This resembles the previous coin in having plain double arches to the crown, and a trefoil on the king's breast. A

small trefoil also occurs at the end of the legend on both sides. The m.m. lys is on the reverse only, before the word POSVI. In the centre of the reverse of this coin there is a large portcullis with chains, which distinguishes it from all other groats of this coinage. It is exceedingly rare, and ought apparently to be classed among the pattern coins.

The example engraved in Ruding (Supplement, part 2, xvi. 16) is now in the British Museum; that from which the illustration is taken (Fig. 3), is in the collection of Dr. Evans. The latter piece has a cross in saltire at each side of the king's neck, which are wanting on the specimen in the National Collection. The small crosses in saltire connect the groat in the collection of Dr. Evans with some groats of the first coinage of Henry VII.; showing that the example in his cabinet is evidently the earlier variety of the portcullis groat.

III. Groat with *m.m. cinquefoil pierced* (Fig. 4). This, like the preceding, has the crown of plain double arches, surmounted by a small orb and plain cross. The king's hair is very bushy. The cusp on the breast is not fleured. Trefoils occur in the legend for stops. It will be noticed that the letters on this coin are less ornamental than on later coins, the straight strokes terminating in concave ends, without any flourish. Of this type thirty-three groats were found at Hounslow, and were the latest coins in that hoard. As no other groats of Henry VII.'s second coinage were present, it is probable that groats bearing m.m. cinquefoil should be placed early amongst those of his second coinage. Dr. Evans is of opinion that this mint mark was first used on gold coins struck about the year 1489, or shortly afterwards.

IV. Groat with *m.m. leopard's head crowned* on both

sides. This has the double-arched crown, the outer bar of which on each side is ornamented with two or three crockets, the inner bars being plain. The crown is rather more depressed on this and on all subsequent coins. It is ornamented by a larger orb and cross moline. The cusp of the tressure on the king's breast is fleured. Small crosses are used as stops.

Some groats have m.m. cinquefoil on the obverse, and leopard's head crowned on the reverse. Others have leopard's head crowned on the obverse, and cinquefoil on the reverse. These varieties connect this m.m. with the preceding. Groats bearing m.m. leopard's head crowned are all scarce.

V. Groat with *m.m. lys issuing from a half-rose* (Fig. 5). This has the crown of double ornamented arches, four crockets on each outer bar, but the inner bars plain. The crown is surmounted by orb and cross moline. The king's hair is less bushy. The cusp on the breast is fleured. Small crosses are used as stops. This is a rare m.m. An angel of Henry VII. in the British Museum having for reverse mint mark the lys issuing from half-rose has for obverse m.m. the cinquefoil.

VI. Groat with *m.m. escallop* (Fig. 6). This has the crown of double ornamented arches, each outer bar having four or five, and each inner bar two crockets. The crown is surmounted by a large orb and cross moline. The king's hair is less bushy. The cusp of the tressure on his breast is fleured. Rosettes are used as stops.

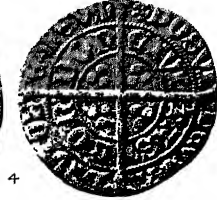
In this groat elaboration of design and minuteness of ornamental decoration reach their culminating point, the groats struck after this showing a marked decline in these respects. The slender extremities of the cross fourchée on the reverse bears a striking resemblance to the shape



2



3



4



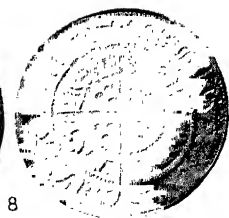
5



6



7



8

9



10



of the forceps of the stag beetle. The letters on this coin are more stunted than on any of the preceding, and are of a transitional character, forming the connecting link between the large elegant letters on Henry VII.'s early groats, and the smaller and simpler letters on the two latest groats of his second issue.

VII. Groat with *m.m. anchor*. This has the crown of double ornamented arches, and small crosses in the legend for stops. The greater finish of the letters, especially the fine strokes at each end of the upper bar of the letter T, and other similar characteristics, appear, at first sight, to give it a claim to be placed before groats with the escallop mint mark. On the other hand, however, the ends of the cross on the reverse of this groat are very like those on the reverse of the groat with the greyhound's head mint mark. And, if we also take into account the fact that angels of Henry VII. are known which have on one side for mint mark a greyhound's head, and on the other an anchor, we can hardly avoid the conclusion that the anchor immediately preceded the greyhound's head. Groats with the anchor mint mark are not uncommon.

VIII. Groat with *m.m. greyhound's head*. As some coins bearing this mint mark have double-arched ornamented crowns (Fig. 7), others single-arched crowns (Fig. 8), it is evident that these groats ought to be placed last of those with double-arched, and first of those with single-arched crowns. The crown is surmounted by an orb and plain cross with concave ends. The king's hair is long and wavy. The cusp on his breast is fleured. These coins are of smaller size than any of the preceding. All with this mint mark are scarce, especially those with the single-arched crown.

IX. Last there comes the groat with *m.m. cross-*

crosslet (Fig. 9), which has been already described. This also is of the same small size with the groat bearing m.m. greyhound's head.

If an appeal be made to the testimony of the hoards of groats discovered at various times, it will be seen that the evidence yielded by them is in entire accord with the argument deduced from an examination of the coins themselves.

The most important finds bearing on this question are those of Hounslow (1860), Bury St. Edmunds (1862), and Clay Coton, Northamptonshire (1864). Of the coins found at Hounslow in 1860, the latest were forty-five groats of Henry VII.; namely, twelve of his first coinage, with the open crown, and thirty-three of his second coinage, with the arched crown, the latter all bearing the mint mark cinquefoil.

At Bury St. Edmunds, in 1862, were found thirty-eight groats of Henry VII. Of these four were of his first, and thirty-four of his second issue. They are fully described in the *Num. Chron.* for 1862. Most of the varieties of the groats with the arched crown were represented. One, bearing no m.m., is said to have had a lys at each side of the neck. The number of specimens of each m.m. is given on the authority of the *Num. Chron.*

There were with m.m. cinquefoil	.	.	.	6
„ „ leopard's head crowned				1
„ „ escallop	.	.	.	7
„ „ anchor	.	.	.	14
„ „ greyhound's head	.	.	.	2

It will be noticed that the rare m.m. lys issuing from half-rose is unrepresented in this find; but the absence of the exceedingly common m.m. cross-crosslet can

hardly be explained, except on the supposition that this hoard was deposited before groats bearing that mint mark had come into circulation.

At Clay Coton, near Rugby, in 1864, were found four hundred and thirty-three mediæval coins, the latest being thirteen groats of Henry VII. Of these, seven were of his first, and six of his second coinage. Of the latter, three bore on the reverse m.m. a small trefoil, two bore m.m. cinquefoil, and of one the mint mark was uncertain, but it was conjectured to be a cross-crosslet. For reasons already stated, this is extremely unlikely; but no argument can be drawn from an uncertain mint mark. It is a point deserving of attention that in this find were discovered three of the comparatively uncommon groats with m.m. trefoil on the reverse, and having a small cross in saltire at each side of the neck; whilst there were only two groats with m.m. cinquefoil, which is the commonest of all the mint marks. This fact tends to prove that the variety with cross in saltire at each side of the neck was the first of all Henry VII.'s groats with the arched cross.

The testimony of the finds then, so far as it goes, bears out the argument drawn from the gradual development of the type in groats of this issue. The above remarks are submitted to those who are interested in the coinage of this period, in the hope that they may lead to a more satisfactory arrangement of these coins than that hitherto adopted.

G. F. CROWTHER.

XVII.

FASTI ARABICI.

VI. Arabian and other Rare Coins from the Collections of Colonel Gosset, Major Trotter, and J. Avent, Esq.

DURING the last two or three years Colonel M. W. E. Gosset, of the 2nd Dorsetshire (54th) Regiment, has taken advantage of a residence at Peshawur, and subsequently at Aden, to collect such coins as came in his way. So successful were his researches, and so favourable his opportunities, that he has brought home a cabinet of some 1500 varieties, many of which are rare, and some apparently unique. The classes represented in this collection are what might be expected from the sites where it was formed. At Peshawur Col. Gosset naturally bought many examples of the chief Indian dynasties, Ghaznawīs, ‘Patāns’ of Dehlī, kings of Jaunpūr, Mālwa and Gujarāt, Moghul Emperors, and various local issues, besides a series of gold Bactrians, which I must leave to others to describe. At Aden he met with those rare Arabian issues which are often so difficult to decipher and to ascribe to the little-known dynasties that struck them. I do not propose to describe the more ordinary additions made by this collection to the materials which I am gathering for *Fasti Arabici*. Some new dates or mints among the Ghaznawīs, Tīmūrīs, and Indian dynasties;

an Amawī dirhem of *El-Rayy*, A.H. 93 (not in Tiesenhäusen); and a silver piece of *Ilek Naṣr*, with inscriptions as *Cat. Or. Coins*, ii. 432, but struck at *Bukhārā*, A.H. 394, form the chief accessions of this minor order. But there are in Col. Gossett's cabinet a certain number of those unique coins which mark red-letter days in the numismatist's sometimes monotonous calendar, and these deserve to be described in detail. They include eighteen coins of Arabian dynasties, of which no example has hitherto been found; they establish the existence of an imāmate of *Dhafār*, on which historians and travellers are silent; and they confirm the history of *Ibn-el-Athīr* with regard to two princes of whom no numismatic evidence has before been discovered.

1. *AV. BENŪ-ZIYĀD OF ZEBĪD. Ishāk-ibn-Ibrāhīm. Struck at Zebīd, A.H. [3]46. Pl. xiii. 1.*

Obv. area, لا اله الا

الله وحده

لا شريك له

Margin (inner), بسم الله ضرب هذا الدينار بزيد سنة ستة

واربعين (sic)

الله الامر الخ (outer)

Rev. area, لله

محمد

رسول الله

المطيع لله

اسحق بن ابراهيم

Margin, جاء الحق وزهق الباطل ان الباطل كان زهوقا ونزل

من القران ما (sic)

Abū-l-Jeysh Ishāk was the fourth prince of the Benū-Ziyād, a dynasty that ruled at Zebīd in the Tihāma from A.H. 204 to 407. Ishāk began to reign before 300 and died in 371, according to Ibn-el-Dayba' (*Cat. Or. Coins*, V, xxxv-xxxvii). No coin of the Benu-Ziyād has before been published. If there were any doubt as to the date of the present dīnār, the name of the Khalif El-Muṭī' would serve to fix it; but, except the omission of the hundred, the year is clear enough. The verses from the Korān, xvii, 83-4, are characteristic of South Arabian coinage; they occur on a coin in the British Museum (*Cat. V*, 362, cf. *corrig.* VII, 103), of which other examples are described below (Nos. 2-4).

2. A'. IMĀMS OF ṢA'DA. *El-Hādī ilā-l-ḥakk*. Ṣa'da, A.H. 298.

As B.M. *Cat. Or. Coins*, v. 362, with date بصعدة سنة ثمان

والتسعين ومائتين and rev. margin جاء الحق الخ Pl. xiii. 2.

3, 3a. A'. Same: but the end of obv. margin seems to have been altered from وثلثمائة سن to ومائتين. Perhaps the old die was used when a new century was entered upon, and an attempt was made by altering the hundred to show the change of the date.

Obv. of 3. Pl. xiii. 3.

4. A'. 'ABBĀSĪ GOVERNOR OF THE YEMEN. Ṣa'da? A.H. 360.

Pl. xiii. 4.

Obv. area,

لا اله الا

الله وحده

لا شريك له

Margin, بسم الله ضرب هذا الدينر بسعص (9) سنة ستين وثلثمائة



AUTOTYPE

Rev. area,

لله
 محمد
 رسول الله
 المطيع لله

Margin, جاء الحق وزهق الباطل ان الباطل كان زهوقا وننزل
 من ال (sic)

The India Office collection, now in the British Museum, contains eight gold coins similar to this, struck at Ṣan'ā, in the names of different 'Abbāsī Khalifs during the first half of the third century of the Flight. The present example, by fabric and style of inscriptions (notably rev. margin), evidently belongs to the same class, which represents the local issues of the Khalifate governors of the Yemen. The mint is, unfortunately, obscure, but I believe it stands for *صعدة*, the *س* being put by mistake for *ص*, as occasionally happens on Arabic coins. The end of the word *ثلثمائة* is obscure, but it can be no other numeral. The inscription might indeed be read *... اثنتين وثلثين*, but for the name of El-Mutī', who succeeded to the Khalifate in 334.

5-22. R. IMĀM OF DHAFĀR. 'Abd-Allāh Ḥamza. Struck at Dhafār, Ṣa'da, and *بعربر*, at various dates.

These eighteen dirhems present a series of problems, some of which appear at present to be insoluble. They are all identical so far as the obv. and rev. areas are concerned. These curiously crossed inscriptions read uniformly:

Obv. area, بسم الله الرحمن الرحيم لا اله الا الله محمد رسول الله
 على ولي الله

Rev. area, الامام عبد الله بن المنصور بالله امير المؤمنين حمزة
بن سليم

The order of the words, owing to the arrangement in crossed lines in hexagram form, is uncertain; possibly حمزة بن سليم should follow عبد الله بن; and the word سليم is written سَلِمَ, and may perhaps stand for سليمان, but as no other example of a curved final alif occurs on this or similar coins I think this is very improbable. The differences between the eighteen coins are found in the margins. Seven of them have the name of an heir (ولى العهد) in the rev. margin, while the remaining eleven have only the following formula arranged in six spaces outside the hexagram: النبي رسول الله صلى الله عليه. The obv. margin in both classes contains the mint and date.

A. Beginning with the eleven coins which have no name of an heir we find the following dates:

- | | |
|--|-------------------|
| 5. Dhafār, 615 or 625. | Pl. xiii. 5. |
| 6. „ 627. | |
| 7. „ [6]41 | |
| 8. „ 653. The fifty is doubtful. | |
| 9. „ 666. | Obv. Pl. xiii. 6. |
| 10. Ša'da, 680. | Obv. Pl. xiii. 7. |
| 11. x 705 or 710. بعدها سنة (خمس or عشرة) وسبع مائة | Obv. Pl. xiii. 8. |
| 12. Dhafār, [7]15 (خمسة عشر) . | |
| 13, 14, 15. Dhafār, dates obscure. | |

B. 1. With name of heir Aḥmad El-Mutawekkil.

- | | |
|---|--------------------|
| 16. Dhafār, 666. Rev. margin. ولى عهده المتوكل على
الله أحمد | Pl. xiii. 9. |
| 17. „ 691. Same. | |
| 18. „ 697. Same. | Obv. Pl. xiii. 10. |

19. Dhafār, 704 ? (. . بع وسبع مائة). Obv. Pl. xiii. 11.
 20. „ „ Obscure.
- B. 2. With name of El-Muntaṣir (or Mustanṣir) Dāūd.
21. Ṣa'da, 672. Rev. margin ولي عهدہ المصنر بالله داود Pl. xiii. 12.
22. Dhafār, 689. „ „ ولي عهدہ المصنر بالله ... داود Pl. xiii. 13.

A consideration of these descriptions shows that a certain Imām 'Abd-Allāh ibn El-Manṣūr retained his name on the coinage for at least eighty years: that is if we take the later date 625 for No. 5 (where it is impossible to be certain whether the decade is عشر or عشرين), and assume خمس to be the correct reading of No. 11. Eighty years is the minimum of his reign or imāmate. Up to the year 666, or for the first forty-one years, he associated no heir with him on his coinage; but in 666 the name of the heir Aḥmad El-Mutawekkil appears, and this recurs in 691, 697, and 704 (?). Meanwhile another heir, Dāūd El-Mustanṣir or Muntaṣir (the reading is doubtful) makes his entrance upon the coins in 672 and recurs in 689. If it were possible to read anything but ستين on No. 16, the confusion would be avoided, and we should assume that Dāūd was first proclaimed successor, and on his death, about 690, Aḥmad took his place. But the date 666 is unusually clear, and it is therefore necessary to suppose either that there were two Aḥmads, one of whom died or was rejected before 672, or else that Aḥmad was disgraced at that time and subsequently, about 690, restored to his dignity as successor designate. The coin struck at Ṣa'da in 680, without an heir's name, may owe this peculiarity to some distinction or inadvertence at

the different mint; and the same may be said of the piece issued in 705 (or 710) at the unknown mint نعر (not نعر, for ن is clearly legible, divided by the border from نعر), though as this coin is posterior to all those which bear the name of any heir, it is possible that the omission indicates the death or degradation of Aḥmad.

The extraordinary length of the Imām Abd-Allāh's reign, and the confusion in his heirs, are alone sufficiently perplexing; but a further difficulty is added when the name حمزة بن سليم is considered. This name at first sight would seem to be that of a governor or minister, but as it occurs throughout the whole period of eighty years, this hypothesis becomes scarcely tenable: it is too much to believe that the governor Ḥamza and the Imām 'Abd-Allāh both saw eighty years of authority. The name must therefore belong to the Imām, and 'Abd-Allah must be in the nature of an epithet, as in the case of the Fātimī Khalifs. But who this Imām Ḥamza ibn Selīm was, who reigned from A.H. 625 to 705, is a question hard to answer. In the middle of the seventh century the Imām of Ṣan'a was Aḥmad ibn El-Ḥuseyn, one of the dynasty of the Benū-l-Rāsī, and it is curious that he should have suffered a rival so near him. Ibn-Batūta found El-Melik El-Mughīth ruling at Ḍhafār in 730, and states that his father El-Melik El-Fāiz, a cousin of the king of Yemen (of the Benū Rasūl), had been governor of Ḍhafār before him and had paid tribute; but that El-Mughīth had made himself independent and refused the tribute. When Ibn-Batūta returned to Ḍhafār in 748 he found El-Nāṣir, son of El-Mughīth, on the throne. Supposing El-Fāiz to have been the first of this line, he must have put an end to the Imāms of Ḍhafār some time

early in the century, and our Imām Ḥamza was probably the last or last but one of the dynasty.

23. *AR. KHĀN OF EASTERN TURKISTĀN. Abū-Shujā' Arslān.*
Struck at Kāshghar, A.H. 423. Pl. xiii. 14.

Obv. area,

ملک
لا اله الا
الله وحده
المشرق

Margin, بسم الله ضرب هذا الدرهم بکاشغرسنة ثلث وعشرين
واربع مائة (sic)

Rev. area,

ابو شجاع
محمد رسول الله
القائم بامر الله ارسلنا
ن قرا خاقا
ن

Margin, محمد رسول الله ارسله الخ

Ibn-el-Athīr tells us (ix. 211) that Ḳadr Khān Yūsuf, son of Bughrā Khān, and ruler of Eastern Turkistān, died in 423, and was succeeded by his son Abū-Shujā' Arslān in Kāshghar, Balāsāghūn, and Khutan, who was, however, deposed (apparently very soon) by his brother Maḥmūd Bughrā Khān. Further details from Ibn-el-Athīr will be found in E. Sachau's *Zur Geschichte Khwarizm*, 42. This is the first known coin of this Arslān, who is not to be confused with his synonym (or synonyms) among the neighbouring Ilek Khāns of Transoxiana; and it confirms Ibn-el-Athīr's date for Arslān's accession. The title Ḳarā Khaḳān occurs on other coins ascribed to the Ilek dynasty; but 'King of the East' is peculiar to Arslān at this period.

24. *R. Naṣr*, brother of Maḥmūd of Ghazna. Struck in
Sijistān, A.H. 409. Pl. xiii. 15.

Obv. area, لا اله الا الله
وحده لا شريك
له القادر باله
نصر بن ناصر الدولة

Margin, بسم الله الرحمن الرحيم ضرب هذا الدرهم بسجستان
سنة ببيع وارء.....

Rev. area, لله
محمد رسول الله
يمين الدولة
وامين الملة
ابو القاسم
مرء.

Margin, لله الامر الخ

Naṣr, son of Nāṣir-el-dawla Sebektegīn, was appointed governor of Sijistān by his brother Maḥmūd of Ghazna in 393 (I. A. ix, 124); Maḥmūd in that year invaded Sijistān, where Khalaf-ibn-Aḥmad paid him a questionable homage; the Ghaznawī besieged him in the Castle of Eḷ-Taḳ, and reduced him to submission. Maḥmūd then invested his brother Naṣr with the government of Sijistān in addition to that of Neysābūr which he already held. M. Sauvaire has given an account of these events in his paper on the Ṣaffarīs in the *Numismatic Chronicle*, Ser. III, i, 129-157. The present dirhem adds an important link to the numismatic evidence there collected. The formula, generally characteristic of the Shī'ī sect, بسم الله الرحمن الرحيم, is noteworthy, especially since the name of the 'Abbāsī Khalif El-Kādir leaves no room to doubt Naṣr's orthodoxy.

I may add that besides some good gold 'Patāns' and Moghuls—notably three exquisitely struck specimens of Jahāngīr (A, Agra, 1019 and 1025, and Lāhōr, 1015, with the kelima)—Colonel Gosset has duplicates of two gold coins mentioned as "unique" in Thomas's *Chronicles*: one is No. 240, p. 298, of Fīrūz and Faṭḥ Khān; the other, No. 340, p. 394, of Shīr Shāh.

Major Henry Trotter, C.B., Military Attaché at the British Embassy, Constantinople, has kindly allowed me to examine his collection of Arabic coins. The following are the most noteworthy.

'ABBĀSĪ KHALIFS.

El-Muktadīr. AR. Antākiya, A.H. 320 عميد الدولة

Ḥarran, 317.

Ḥalab, 318.

Surra-men-raū, 304, 305.

Sūḳ-el-Ahwāz, 308.

El-Kūfa, 308.

Medīnet el-Selām, 311, 313.

El-Kāhur. AR. El-Rāfiqa, 320.

El-Muttaḳī. AR. Antākiya, 329.

El-Mustekfī. AR. Ṭarsūs, 333.

El-Kūfa, 334 | ابو الحسن محمد | بن امير المؤمنين |
امام الحق | المستكفي بالله

IKSHĪDĪ. *El-Ikshīd*. AR. Dimashq, 334.

Obv. area, usual formula in three lines.

Margin: inner, mint and date; outer, لله الامر النخ.

Rev. area, محمد | رسول الله | صلى الله عليه | المستكفي |
بالله | الاخشيد

Margin, محمد رسول الله ارسله النخ

MARWĀNĪ. *Abū-'Alī el-Ḥasan*. AR. Mayyāfārikīn, 385.

MONGOLS OF PERSIA.

Ghāsān. *AR.* Amāsiya, ستمانة | بو | ب | سنة (*sic*).

Khelāt, year obliterated.

Kamnāzār (کمنازار), 700.

Abu-Sa'īd. *AR.* Erwend (لرود), 33 (Ilkhānīya era).

Ḳayṣariya, 33 (Ilkhānīya era).

Moḥammad. *AR.* Ḳayṣariya? (نصرت) 728.

Toghā-Tīmūr. *AR.* Amāsiya, 737.

The last two dates are remarkable; so are the mints of all the seven.

GOLDEN HORDE. *Uncertain*. *AR.*

Obv. لا اله الا الله

الله محمد

رسول الله

Rev. ...

ظفر بحما لله؟

Moḥammad Artin of Anatolia. *AR.* Arzenjān, Sīwās, and Ḳayṣariya; dates obliterated.

Major Trotter has also the good fortune to possess a coin—the first Arab die that I have seen—of the Khalif El-Muktefī (with name of ولي الدولة), probably of about A.H. 291, mint Arrān. It is made of a species of gun-metal, about $2\frac{1}{2}$ inches long, and is much worn.

I have examined seven impressions of coins sent me by Mr. J. Avent, of Bombay, for use in my *Fasti Arabici*, and they prove to be of such unusual rarity that I hasten to give a brief description.

I begin with a unique gold coin of Naṣrat Shāh of Dehlī, the first that has ever been published.

1. *AV.* USURPER KING OF DEHLI. *Naṣrat Shāh*. No mint.
A.H. 800. Wt. 170 grs.

Obv. فى زمن الامام

امير المؤمنين

خلدت خلافته

٨٠٠

Rev.

[الوائق] [بتا] [ييد]

الرحمانى (*sic*) نصرت شاه

السلطانى خلدت

مملكته

2. *N. Shēr Shāh*. No mint. A.H. 949. There is nothing exceptional in the inscriptions, which resemble *B.M. Cat. Ind. Coins, Dehli*, 548, *R*, but the margins are cut off. The type is however different from Thomas's two gold coins of this king.
3. *N. ILKHĀN OF PERSIA. Arghūn*. Mint obliterated. A.H. 68x. Inscriptions in Mongol and Arabic as on the silver, but the reverse margin, nearly obliterated, shows الملك توتى الملك من تشا . . . This is the first gold piece of Arghūn that I have seen.
4. *N. JELĀYRĪ. Sheykh Oweys*. Baghdād, A.H. 762. As Fraehn, *Rec.* p. 647.
5. *R. Connecting Link between Amawīs and 'Abbāsīs*. Marw. A.H. 130. Usual formulas.
- 6, 7. *R. TĪMURĪ. Tīmūr and Maḥmūd*. Yezd, A.H. 797, and Herat, 796. Both are new types and new dates.

Mr. Avent supplemented his wax impressions by sending me a box of very interesting gold and silver coins of the fourth and fifth centuries of the Hijra:—

8. *R. KURDISH CHIEF. Bedr ibn Ḥasanweyh*. El-Rūr? A.H. 39x.

Obv. area,

ذو
لا اله الا الله
وحده لا شريك له
القادر بالله
بدر بن حسنويه

Margin, الدرهم بـ ١٠٠ سنة روتسعين وثلاثمائة etc.

Rev. area,

له
محمد رسول الله
مجد الدولة
وكهف الامة
ابو طالب

*

Margin, محمد رسول الله ارسله الخ

I have not been able to interpret the words at sides of obv.

9. *AV. SELJŪKĪ OF KERMĀN. Sultānshāh, son of Kāward Bardasīr, A.H. 471.*

Obv. area, لا اله الا الله
وحده لا شريك له
ملك البر والبحر
ركن الدين
ولدولة (sic)

Margin (inner), بسم الله ضرب هذا الدينار ببردسير سنة احد
وسبعين واربع مائة

(outer), محمد رسول الله ارسله الخ

Rev. area,

محمد رسول الله
صلى الله عليه
المقتدي بامر الله
فخر الملوك
سلطان شاه

Margin same as outer obv. margin.


10. *AV. Same Prince. Kīzdū (for Kīzdabād?), A.H. 4x1.*

Obv. area, لا اله الا
الله وحده
لا شريك له
القائم بامر الله


Margin (inner), بسم الله ضرب هذا الدينار بكيزدو سنة
احد واربع مائة

(outer), لله الامر الخ

Rev. area,


 محمد رسول الله
 صلى الله عليه
 ركن الدولة
 سلطان شاه

Margin, محمد رسول الله ارسله الخ

Sultānshāh was ruling Kermān in 472 when Melik Shāh visited that province, and continued to govern it in 473, but the date of his death is not recorded. He must have succeeded to the throne about 470; for on the death of Kāward in 466, another son, Tūrān Shāh ibn Kāward, came to the throne and issued a coin at Bardasir in 467, according to Erman (*Num. Zeitschr. Wien*). See my *Essays in Oriental Numismatics*, 2nd Series, 2-5, for an account of Kārā-Arslān Kāward. Mr. Avent also possesses (11) a gold coin of the father (mint and date illegible), whose name appears on the obv. as الملك المظفر (؟) قرا ارسلان, while the reverse shows the name of the Khalif El-Kāim, and 'Imād-eḷ-dawla, Kāward's surname. Above rev. is , and beneath م.

12. R. CHIEF OF THE BAṬĪḤA. Muhedhhib-eḷ-dawla. El-Sinnebra (?), A.H. 390.

Obv. area,

لا اله الا الله
 وحده لا شريك له
 الامير الملك
 مهذب الدولة
 ابو الحسن

Margin, بالصخرة (sic) سنة تسعين وثلاث مائة etc.

Rev. area,

الله

محمد رسول الله
 صلى الله عليه وسلم
 القادر بالله الملك بها
 الدولة وضيها الملة
 ابو نصر

Margin, محمد رسول الله ارسله الخ

Abu-l-Ḥasan ‘Alī ibn Naṣr Muhedhdhib-el-dawla, lord of the lower Euphrates Valley (El-Baṭīḥa), appears frequently in the annals of Ibn-el-Athīr, from A.H. 373 onwards. He was driven from his country in 394, but was speedily restored by Behā-el-dawla, whose name appears on the reverse of this coin, and to whom he was related by marriage. Abu-l-Ḥasan died in 408. No coin of his has hitherto been published.

13. R. QĀḤWEYHĪ. *Mohammad ibn Dushmanzār*. Mint oblit.

A.H. 414.

Obv. area,

لا اله الا الله
 محمد رسول الله
 القادر بالله
 مجد الدولة
 محمد بن دشمنزار

Margin, اربع عشرة واربع مائة

Rev. area,

سبح
 الله احد الله
 الصمد لم يلد و
 لم يولد ولم يكن
 له كفوا احد

Margin, محمد رسول الله ارسله الخ

14. *AR. Same Prince.* [Iṣba]hān, A.H. 414.

As 13 : but above obv. رضا ; margin, مائة سنة
 مائة ; and above rev. قل هو instead of
 مائة , and ornaments at side.

15. *AR. Same Prince.* Sābūr-Khawāst, A.H. 414.

Obv. area,

رضا
 لا اله الا الله
 وحده لا شريك له
 القادر بالله امير
 الامراء سما الدولة
 توفيق

Margin, مائة سنة (sic) خواست سنة اربع عشر (sic) مائة.

Rev. area,

الله
 محمد رسول الله
 شاهانشاه
 مجد الدولة
 محمد بن دشمنزار

Margin, محمد رسول الله ارسله الخ

16. *AR. Feramerz, son of the above.* Mint obliterated. A.H. 412.

Obv. area as 13 : but above بشر , and traces of title of
 Feramerz instead of محمد بن دشمنزار .

Margin, مائة سنة

Rev. as 13 : but above قل هو , and beneath محمد بن
 دشمنزار .

STANLEY LANE-POOLE.

BIRLING, EAST DEAN, EASTBOURNE.

Nov. 1887.

MISCELLANEA.

TREASURE TROVE FROM DENBY, NEAR BARNSELY, YORKSHIRE.—The following is a rough list of fifty-one silver coins recently discovered at Denby, not far from Barnsley, in the West Riding. As will be seen, the deposit must have been made not very long after the year 1641. Denby lies among the hills in the south-west angle of Yorkshire, and must, in the days at which these coins were deposited, have been a wild and little inhabited region. This would account for the very poor condition in which some of the coins were, some of the older of them being barely decipherable. It would also make it more natural that the hoard should contain coins extending over a considerable period, from before 1558 (Philip and Mary) to 1641.

In 1642 and 1643 there was more activity in the Civil War in Yorkshire, where the Royal army, under the Marquis of Newcastle, was opposed by Fairfax, than in other parts of England, save in the south-west. In May, 1643, Fairfax defeated Lord Newcastle at Wakefield, which is not more than fifteen miles from Denby. It is easy, therefore, to surmise the circumstances in which this deposit was made.

Philip & Mary,	Groats, 4.
Elizabeth,	Shilling, 1.
„	Sixpences, 20.
„	Groat (?) 1.
„	Threepence, 1
James,	Shillings, 2.
„	Sixpences, 3.
„	Thistle marks, 2 (Scottish).
„	Shillings, 2 (Irish).
Charles I.,	Halfcrown, 1 (m. m. triangle).
„	Shillings, 7 (all lace collar).
„	Sixpences, 7 (1 ermine mantle, 6 lace collar).

The latest m.m. on any piece is the triangle in circle (A.D. 1641). The coins were all in extremely poor condition and contained, so far as could be seen, no rarities.

CONTEMPORARY DOCUMENTARY EVIDENCE ON THE SHORT CROSS QUESTION.—Page after page of this *Chronicle* has been devoted to the above subject, and the able pens of Mr. Longstaffe, Dr. Evans, Sir Henry Ellis, and Mr. Kenyon have proved to the satisfaction, I should think, of all numismatists that the short cross issue of Henry II., bearing the legend HENRICVS REX, was continued by Richard I. and John. Nevertheless, if any doubt remains, the following passage, translated from the second continuation of the *Chronicles of Florence of Worcester*, which has, I believe, escaped the research of the above writers, must set it at rest:—

“A.D. 1205. The money issued long before in the year eleven hundred and fifty-eight was this year recoined.”¹

The year 1205 was the sixth of the reign of John, and 1158 the fourth of that of Henry II.

This continuation of the *Chronicles of Florence of Worcester* was written by John de Taxter, a monk of Bury St. Edmunds, who died about 1265. It is, therefore, highly satisfactory that so important and ingenious a theory of our modern numismatists should be thus clearly proved by the evidence of a contemporary writer to be correct.

I came across the passage while searching for historical notes on the coinage of the reign of Stephen, a work in which I have for some time been engaged, and take this opportunity of mentioning that I shall be much obliged to any collector who will furnish me with careful readings of coins of that period.

WALTER J. ANDREW.

MOSS SIDE, ASHTON-UNDER-LYNE,
November 23rd, 1887.

UNPUBLISHED CANTERBURY PENNY OF HENRY VIII.—This coin is not to be found in Hawkins' *Silver Coins of England* (third edition), and therefore a description of it may not be out of place in the *Chronicle*.

The general type is that of the second coinage as arranged by Hawkins, the legend on the obverse running h. + D. + G ROSA + SIE + SPIA. The mint mark is T, hitherto, I believe, unnoticed on pennies of this reign.

The reverse differs, again, from Hawkins in being of Archbishop Wareham's mint at Canterbury, which city is not mentioned as issuing pennies of the second coinage.

HENRY SYMONDS.

¹ *Florentii Wigorniensis Monachi Chronicon ex Chronicis*. Thorpe, 1848. Tom. ii. 166.

UNPUBLISHED GOLD COINS OF JAMES I. — Mr. Kenyon's recent work on the Gold Coins of England, being a first attempt at anything like a systematic history of the gold coinage of this country, he has necessarily omitted therein a very large number of varieties; and a long list of omitted mint marks during the various reigns might be furnished. I will content myself for the present by calling attention to such gold coins of the reign of James I. as are not recorded by the author, and most of which I exhibit with this note to the Society. The list of such omissions are as follows:—

Sovereign, first coinage	.	.	.	m.m.	lis.
Spur Ryal	.	.	.	"	coronet.
Double Crown or Half Unite	.	.	.	"	grapes.
"	"	"	"	"	key.
"	"	"	"	"	bell.
"	"	"	"	"	tower.
"	"	"	"	"	cinquefoil.
"	"	"	"	"	trefoil.
"	"	"	"	"	crescent.
Angel	.	.	.	"	lis.
Half Angel	.	.	.	"	trefoil.
Britain Crown	.	.	.	"	grapes.
"	.	.	.	"	coronet.
"	.	.	.	"	bell.
"	.	.	.	"	tower.
"	.	.	.	"	cinquefoil.
"	.	.	.	"	trefoil.
"	.	.	.	"	plain cross.
Thistle Crown	.	.	.	"	rose.
"	.	.	.	"	coronet.
"	.	.	.	"	tower.
"	.	.	.	"	cinquefoil.
"	.	.	.	"	tun.
Half Crown	.	.	.	"	bell.
"	.	.	.	"	key.
"	.	.	.	"	plain cross.
"	.	.	.	"	trefoil.
"	.	.	.	"	tower.

With regard to the thistle crown, the author states that coins of that denomination do not seem to have been struck after 1611, when the addition to their value made them extremely inconvenient for reckoning. As will be seen by the list above, they were coined in 1612, 1613, and 1615, which are the dates respectively of the mint marks tower, cinquefoil, and tun. It

should be noted that the thistle crowns with the two last-mentioned mint marks differ from the others in the omission of the letters I R on the obverse, and in the smaller size of the lettering and other differences of workmanship. One thistle crown is in my possession on which the mint mark has been said to be that of the book, but the piece is somewhat worn, and the mint mark so indistinct that there may be some doubt as to this, particularly as the letters I R on the obverse are not omitted, although, on the other hand, the crown surmounting the thistle on the reverse is of the later broad and flat form, as on the pieces with the mint marks cinquefoil and tun.

I have seen and handled all the coins mentioned, and in addition to these, a large number of various pieces of the same reign which vary in legends or otherwise from those recorded by Mr. Kenyon. I have upon the present occasion referred simply to the omitted mint marks, and upon consideration of these and of those which are recorded, it would appear to me that the following pieces or most of them should be in existence, although I have hitherto failed to meet with any of them, viz. :—

Spur Ryal	. mm.	grapes, key, and bell.
Double Crown	. „	mullet and book.
Angel	. „	grapes, key, bell, book, and plain cross.
Half Angel	. „	tun, book, and crescent.
Britain Crown	. „	key, book, and crescent.
Thistle Crown	. „	grapes, key, and trefoil (and if the m.m. book exists, then the subsequent mint-marks may probably be looked for also).
Half Crown	. „	grapes, mullet, and book.

I shall be glad to have a note of any of the above that may come under the notice of the members of this Society. I have referred to the m.m. *book* by that name, and in that respect have followed Mr. Kenyon, but I cannot help thinking that the mint mark in question is really the heraldic billet, one of the marks of difference employed in early but not in later times, particularly as we have as mint marks on the coins of this period most of the other marks of heraldic difference or cadency, namely, the crescent, mullet, martlet, annulet, fleur-de-lys, and rose.

I have never seen or heard of the mint mark saltire cross as occurring on the coins of James I., although Mr. Kenyon

includes it in his list at the end of the king's reign, without, however, attempting to note any coins to which it is attached. In this respect he has followed Mr. Hawkins, who has done likewise in his work on the silver coins of England.

H. MONTAGU.

ALTERATION OF AN AMERICAN DOLLAR.—As it may prove of some service to the numismatic world generally, I consider it a duty to place before them particulars of a very clever species of fabrication that is now going the round, to the detriment of collectors of American coins. The knowledge I have acquired about the subject in question I am sorry though not unwilling to own has been gained by bitter experience, but if it should be the means of preventing others from being deceived, or of bringing to light and exposing the perpetrator of this system of fraud, who, I am told, is still carrying on his nefarious trade in the United States, it will not have been gained in vain.

The coin now before the Numismatic Society is a United States dollar, probably of 1801 (as this date would, perhaps, be the easiest to alter to 1804), of which the last figure of original date has been entirely effaced, and a new figure "4" laid on with silver solder, in such a perfect and ingenious manner as to deceive even when submitted to a powerful lens.

The dollar of 1804, as perhaps few but Americans are aware, is the *rara avis* amongst dollars, and consequently, as its great rarity consists only in its date and a trifling variety of detail, which I mention later on, there is, perhaps, a great inducement to counterfeit it by means of other dollars of less rarity but of similar type. The forger effects his work by a simple alteration of the last figure of the date, relying on the other minute differences (which are only known to a few) escaping notice.

This altered piece I purchased of an American, who I have since suspected was not as ignorant of its character as he appeared to be; and I may warn collectors of American coins over here that it will be advisable in future not to purchase any great American rarity unless the vendor is well known to them, or they have some acquaintance with this clever process of alteration. This identical coin (since I acquired it) has been taken to the United States mint for the opinion of the authorities there, and they pronounced it a "Dollar altered to 1804; last figure of original date removed, and a clean-cut '4' in-

served in its stead ;” but as I was not quite satisfied with this decision without a sufficiently severe test being applied to the coin, I took it to the Royal Mint, and had it subjected to the heat of a furnace (but not to white heat), with the result that it confirmed the opinion of the United States mint authorities so far that it exposed the borax used with the hard solder, and fused the greater part of the inserted figure, but left the original part of the date intact ; thus clearly showing that the metal composing the alteration was not of the same standard as the original. As a general rule the solder should always be easier of fusion than the metal to which it is to be attached, and care is also taken that the solder, which for silver is usually prepared from equal parts of silver and brass, and made easier of fusion by the admixture of one-sixteenth of zinc, is as far as possible of the same colour as the metal that is to be soldered.

The whiteness of the coin now before the Society of course is the result of the furnace-heat, as before the test it had the tone of an ordinary silver coin in circulation.

Coins with altered dates are not always the work of a forger, as there are pieces known as “Mint Alterations” in the American, English, and other series ; but in these cases the figure is always struck on the coin, and generally over the original date in such a manner that the alteration may be seen, whereas a fabricated date is generally concocted in such a way that it may not be visible to the naked eye.

Mint alterations in the English series occur under Elizabeth, James I., Charles I., the Commonwealth, and at various periods of the milled series ; and under the Commonwealth there exist many fabrications of rare dates, but the ingenuity displayed on the coins of this period, though not by any means to be despised in some instances, yet will not bear comparison with this more recent masterpiece of American ability.

I may state, as a guide to collectors over here, that I am informed on good authority that in the genuine 1804 dollar the first figure of date touches the curl under the bust of Liberty, and the last letter of LIBERTY touches the star next to it.

The extreme rarity of this coin is inexplicable, as, although the number coined (19,500) was small in comparison with other years, yet one would think it was sufficiently large to allow a greater number of them to be in existence than there actually is, unless the greater bulk of them were melted down. However, as the Bushnell and one or two other famous American collections did not contain a specimen, there are at least some

grounds for the high premium it commands in the United States, which is no less than 600 dollars, or over £100 in English money.

I have since seen another altered dollar of 1804, in the possession of an American, who kindly allowed me to compare it with my own specimen, and as it was from a different die, there is no doubt that dollars of more than one date are used to effect this alteration.

If, as I am led to believe, all United States current dollars from the earliest period are still legal tender, then surely this is distinctly an offence against the Coinage Act, and as such could be made the subject of a Government inquiry, and the ultimate prosecution of the offender.

The English Act (24 & 25 Vict., cap. 99, sec. 16) on this subject says, "Whosoever shall deface any of the Queen's current gold, silver, or copper coin by stamping thereon any names or words, whether such coin shall or shall not be thereby diminished or lightened, shall in England and Ireland be guilty of a misdemeanour, and in Scotland of a crime and offence, and being convicted thereof, shall be liable, at the discretion of the Court, to be imprisoned for any term not exceeding one year, with or without hard labour." From this it will be seen that any person effecting any alteration on her Majesty's current coin would be liable to prosecution under the said Act.

There are many Americans who know of the manufacture of these altered coins, and one from whom I had a visit even knew the fabricator's name, but considered himself bound not to divulge it; so if there is a similar law to our own in the United States, there should be no difficulty for the American Government putting a stop to this defacement of their current coin, which if persisted in will make the pursuit of American numismatics a very dangerous one, and leave no inducement to amateurs in the old country to collect the rare moneys of the great Republic on the other side of the Atlantic.

WM. J. WEBSTER.

RECENT SALE OF COINS.—On the 6th to the 8th of July, Messrs. Sotheby, Wilkinson and Hodge, of Wellington Street, sold the collection of Anglo-Saxon and English coins belonging to the late Major W. Stewart Thorburn, who is known to numismatists as the author of the *Guide to the Coins of Great Britain and Ireland*. From the fact also that many of the specimens in Major Thorburn's collection are referred to and described in

Kenyon's works on the gold and silver coinages of England, a large number of buyers were present at the sale, and exceptional prices were in many cases realised, amongst which may be noticed the following:—A London penny of Alfred, £6 5s.; another of Harold I., £2 12s.; others of William I., £2 10s. each. Heavy groats (8) of Edward IV., of London Mint, £3 14s. Sovereign of Henry VIII., of thirty-seventh year, £12; another of third year of Edward VI., £18. Angel of Philip and Mary, £9 2s. 6d. Sovereign of Elizabeth, £6 10s. *Milled* half-sovereign, £9 9s. Hammered crown, m.m. 1, £4 10s. Thirty-shilling piece of James I., £12 17s. 6d.; and crown with rev. QVÆ · DEVS, &c., £7 17s. 6d. Tower crown, of 1645, of Charles I., £11 11s. Oxford pound piece of 1642, £15. The Inchiquin crown, £7 15s. Commonwealth crown of 1652, £4 8s. Half-broad of Cromwell, £32 5s. Hammered halferown of Charles II., without mark of value, £8 8s.; and shilling of same issue, £3 17s. 6d. Five-guinea piece of Anne, of 1705, £14 15s.; and her pattern halfpenny in copper, with bust on both sides, £9. Five-guinea piece of George I., of 1726, £14 15s. Proof crown of George II., of 1732, £11 5s.; and halferown of 1731, £8 15s. Pattern two-pound piece of George III., of 1820, by *Pistrucci*, rev. St. George and the Dragon, £18 15s.; pattern half-guinea, of 1764, by *Tanner*, rev. shield, £10 10s.; and pattern seven-shilling piece, by *Yeo*, rev. lion on crown, £4 10s. Pattern crown, *silver*, of William IV., of 1831, by *Wyon*, £23. Pattern five-pound piece of Victoria, of 1839, by *Wyon*, £15 5s. Proof sovereign and half-sovereign of 1880, £16 10s.; and proofs in *gold* of Maundy set of 1838, £21 15s. Pattern florin, 1848, by *W. Wyon*, in *silver*, £6 6s. Proof set, of 1845, of crown, halferown, shilling, and sixpence, £30, &c. The whole sale, consisting of 443 lots, realised £1,494 11s. 6d.

H. G.

SALE OF A CABINET OF SELECT GREEK SILVER COINS. (Sotheby's, 27 June—1 July, 1887).—We think it our duty, more especially in the interest of our foreign subscribers, to make some special comment on this extraordinary Sale. When the catalogue came into the hands of numismatists it was found to contain descriptions of numerous Greek coins, many of which were of the highest rarity and interest. On the strength of these descriptions more than one foreign numismatist gave, or was prepared to give, commissions for the sale, and several well-known collectors came from a distance to be present.

When the collection was examined at the sale-rooms it was found largely to consist of what may be described as the most astonishing assemblage of forgeries ever offered to the public. This was the opinion, openly expressed, of the representatives of the British Museum, of several experienced collectors of Greek coins, of members of the Numismatic Society and of all the principal English coin-dealers. It is, we think, to be regretted that, in view of this testimony, the heads of so eminent and fair-dealing a firm as that of Messrs. Sotheby, Wilkinson & Hodge did not see their way to stopping the sale, or at any rate to weeding out the whole of the forgeries. The sale catalogue, we must point out, gave (practically) no indication whatever that a large number of the best coins were false or doubtful. In the "Notice" prefixed to it the owner (who is described as "a zealous and hereditary amateur") states, or allows the compiler of his catalogue to state, that the collection includes "very few" specimens of which he doubts the authenticity, and that this "doubt, or more than doubt, will be found expressly stated" in the body of the catalogue. The doubts of the owner or the compiler seem to have arisen only in the case of some seven or eight coins in the whole collection, for to that number only is any note of warning appended. The owner concludes by commending the collection "to the careful personal examination of the intending purchaser, without obtruding any recommendation or authority whatever," and introduces a quotation from the catalogue of the historic Northwick Sale to the effect that purchasers must buy at their own risk, as a difference of opinion may arise as to the authenticity of some of the specimens. It is well known that few great collections are offered for sale which do not contain a doubtful specimen here and there. In such cases (as the Northwick Catalogue suggests) *Caveat emptor*. But when, as in the present instance, nearly all the best coins are false or doubtful, the intending purchaser may fairly look for something more than a general caution to be on his guard. We have no evidence to prove, and we do not suggest, that the owner of this collection offered it for sale well knowing that many of the coins were false. But it is clear that he has—apparently during many years—been grievously imposed upon. If he be a member of the Numismatic Society of London he is earnestly requested to give his brother members all the information in his power as to the sources from which he obtained the spurious pieces. Fortunately, collectors easily remember the precise circumstances under which they obtain the *rariora* of their cabinets.

With regard to the sale itself, some of the genuine specimens

realised fair prices considering the circumstances under which they were sold, but a large number of what purported to be the best pieces in the collection sold for about the price of electrotypes. Some undoubted forgeries, especially those secured by Mr. — Browning, fetched sums considerably over their metal value. We trust that none of the forgeries from this sale will, through inadvertence on the part of their present possessors, find their way again into circulation. These forgeries would not indeed deceive the experienced collector, but they might easily deceive the general public, and even some numismatists who have not made a special study of the Greek series.

We have only to add that certain forgeries in the collection were certainly or probably manufactured from rare and genuine specimens in the British Museum. The authorities of our National Collection have hitherto been most liberal in allowing electrotypes and casts to be made from the originals in their care. This permission, accorded in the interests of students of art and numismatics, will henceforward have to be granted much more sparingly. We do not suggest that the electrotypes and casts from which the forgeries now in question were produced were originally obtained with any evil intention, but it is obvious that they must have fallen into very bad hands before, in an altered form, they found their way into this "cabinet of select Greek silver coins."

THE EDITORS OF THE *Numismatic Chronicle*.

NOTICES OF RECENT NUMISMATIC PUBLICATIONS.

The *Zeitschrift für Numismatik*, Bd. xv., Heft i., contains the following articles:—

1. A. von Sallet. Acquisitions of the Royal Coin Cabinet, Berlin, 1886—1887.

The Greek series in the Berlin Museum has been enriched during the year by the addition of 159 pieces, among which the following are the most important:—

Palatium? near Reate, in the Sabine territory, a bronze coin of the first century, B.C. *Obv.* Head of Vulcan. *Rev.* **PALACINV—2**, winged Bacchic mask, from the Borghesi Cabinet.

Heracleia Lucaniae. A very fine didrachm, with Herakles kneeling on the reverse, contending with the Nemean lion.

Chersonesus Taurica. *Obv.* **ΧΕΡΣΟΝΗΣΟΥ** Hygieia. *Rev.* **ΕΛΕΥΘΕΡΑΣ** Asklepios, \AA , a very rare type.

Panticapaeum. Five silver coins. *Obv.* Heads of Pan, Apollo, and Dionysos. *Rev.* Forepart of lion, forepart of horse, eagle, lyre, ivy-wreath.

Abdera Thraciae. A fine specimen of the stater with the dancing girl on the reverse, the signet of the magistrate, Molpagoras.

Thrace? An unpublished silver coin, weight $17\frac{1}{2}$ grs., with a female head on the obverse, and **ΣΑΜΜΑ** and a lion's head on the reverse.

Perdiccas II of Macedon. *Obv.* Horse. *Rev.* Helmet.

Pallantium. A bronze coin of Achaean League types, and inscription **ΠΑΛΛΑΝΤΕΩΝ ΑΧΑΙΩΝ**, magistrate **ΙΠΠΑΡΧΟΣ**.

Elis. Several very fine didrachms with heads of Zeus and Hera, showing the transition (B.C. 370—362) from the more severe style of the age of Pheidias to the softer style of Praxiteles. These coins formed part of a recent find in Peloponnesus.

Axus Cretae. A specimen of the newly discovered stater, with inscription **ΦΑΞΙΟΝ** in archaic characters.

Polemo I of Pontus. A very rare \AA coin. *Obv.* Head of king. *Rev.* **ΒΑΣΙΛΕΩΣ ΠΟΛΕΜΩΝΟΣ ΕΥΣΕΒΟΥΣ** Star.

Cyzicus. A fine specimen of the large bronze coin of the time of Faustina, Junior. *Obv.* **ΚΟΡΗ ΣΩΤΕΙΡΑ ΚΥΖΙΚΗΝΩΝ**. *Rev.* **ΚΥΖΙΚΗΝΩΝ ΝΕΟΚΟΡΩΝ**. Group of men erecting baskets on poles, surmounted by monograms **ΠΥ ΚΥ**, probably for **ΠΥ[ΘΙΑ] ΚΥ[ΖΙΚΗΝΩΝ]**.

Halicarnassus. Coin of Hadrian, with ideal portrait of Herodotus.

Titacazus. *Obv.* **ΔΗΜΟΣ**. *Rev.* **ΤΙΤΑΚΑΖΗΝΩΝ** Tyche standing. No town of this name is known, but from analogous names, *e.g.* Tityassus, the author is inclined to place it in Pisidia or Phrygia.

Barbarous imitation of Athenian tetradrachm, with uncertain Phœnician legend on reverse, supposed by the writer to read **כרנג**, but more probably **סרנג**.

Axum, in Ethiopia. *N* of King Aphilas, and \AA of King Ulzebas, with the usual inscriptions.

Among the Roman coins the most remarkable is a very fine medallion of M. Aurelius Cæsar, the reverse type of which represents Aeneas with the young Ascanius behind him, about to sacrifice a sow to Juno, whose temple occupies the background.

The Berlin Museum has also acquired, during the year, 93 Mediæval and 146 Oriental coins.

2. A. Löbbecke. Greek coins in the writer's cabinet, among which the following may be here mentioned.

On the coins hitherto attributed to Aurunca, in Campania, the author has read the inscription **NEO[ΠΟ]Λ[ΙΤΩΝ]**. The Oscan legend on the reverse is merely a magistrate's name. Aurunca is, therefore, to be struck out of the list of mints in Campania.

Apollonia? in Thrace. To this city the author would attribute the coin reading **ΑΠΟΛΛΩΝ[ΟΣ] ΙΑΤΡΟ[Υ]** usually assigned to Asia Minor. The small silver coins given to this city (*Hist. Num.* p. 236) belong probably to Panticapæum.

Trajana Augusta, in Thrace. The coins of this town read **ΑΥΓΟΥΣΤΗΣ ΤΡΑΙΑΝΗΣ**, and have hitherto been confused with those of Trajanopolis, which read **ΤΡΑΙΑΝΟ-ΠΟΛΕΙΤΩΝ**.

Alyzia, in Acarnania. A stater of Corinthian types with a new symbol, a coiled serpent.

Stratos, in Acarnania. A Pegasus-stater reading **ΣΤΡΑΤΙΩΝ**, symbol, head of Acheloüs, probably struck about B.C. 300. No staters of this city were previously known.

Phocis. A very rare drachm. *Obv.* Head of Apollo. *Rev.* **ΦΩ** Lyre, probably struck between B.C. 357 and 346 (cf. *Hist. Num.*, p. 288.)

Alexandria Troas. Colonial coin of Macrinus. *Rev.* **COL. [ΑΛΕ]ΧΑΝ. ΑΥΓ ΤΡΟ.** Apollo seizing Daphne, who grasps the laurel-tree.

Ilium. Imperial of Gordian, type Judgment of Paris.

Neapolis, in Ionia. Imperial, with addition of surname **ΑΥΡΗΛΙΕΩΝ**. The writer publishes several specimens having the magistrate's title, Grammateus.

Gordiuteichos, in Caria. Of this little-known town, mentioned only by Livy and Stephanus Byzantinus, Herr Löbbecke here, for the first time, publishes a coin. It is a small bronze piece, *Obv.* Head of Zeus. *Rev.* **ΓΟΡΔΙΟΤΕΙΧΙΤΩΝ** Cultus-image of Aphrodite, as on certain coins of the neighbouring Aphrodisias.

Araxa, in Lycia. Imperial coin of Hadrian. *Rev.* **ΑΡΑΞΕΩΝ** Zeus Nikephoros enthroned. No Imperial coins of this town were previously known.

Several unpublished coins of the towns of Apollonia, Balbura, Choma, and Patara, in Lycia; of Apollonia, Ariassus and Palæopolis, in Pisidia; of Isaura, in Cilicia; and of Philadelphia,

in Lydia, on the last of which the river-god, Cogamus, here written **KOGAMIC**, appears for the first time.

Titacazus. This coin, already mentioned by Von Sallet in the previous article, is attributed, by Herr Löbbecke, to Lydia, where it was found at a place called Pyrgos (Birgeh).

Apamea, in Phrygia. Autonomous Æ of time of Commodus, with *obv.* **ΔΙΟΝΥΣΟC ΚΕΛΑΙΝΕΥC**, bust of Dionysos Kelaineus. *Rev.* Two lions drawing chariot, in which is the cista mystica.

Cibyra, in Phrygia, with inscr. **OYPANIOC**, and portrait of Q. Veranius, Legatus of Germanicus, in Asia Minor.

Synnada, in Phrygia. Æ of the Imperial period. *Obv.* **AKAMAC**, head of hero, Akamas, who here occurs for the first time on coins.

3. W. Drexler. On some coins published by Sabatier, in the *Revue de la Numismatique Belge*. In this paper, which consists of twenty-five closely-printed pages, bristling with references, many valuable corrections lie buried, but the form in which they are here offered to the student of Greek numismatics, unattractive, not to say repellent in the extreme, will probably defy the patience of scholars outside the limits of the Fatherland.

The *Revue Numismatique*, 1887, Part II., contains the following articles :—

1. L. de Hirsch. Orontobates, or Rhoontopates. In this valuable paper the writer proves beyond all doubt that the legend **ΟΡΟΝΤΟΠΑΤΟ** read by Barthélemy, Eckhel, and Mionnet, on the silver stater of the last Carian satrap conquered by Alexander the Great, B.C. 333, is a misreading. The correct inscription is **ΡΟΟΝΤΟΠΑΤΟ**, which agrees much more closely with the form of the name as it occurs in our texts of Arrian, where it is written 'Οροντοβάτης.

2. Th. Reinach. Mithradates Eupator and his father. The author here discusses the vexed question of the attribution of the coins of Mithradates Philopator Philadelphus, whom he identifies with Mithradates Euergetes, the father of Mithradates the Great. As Philopator is called, in an inscription recently discovered in Rome, the son of Mithradates, we are compelled to suppose either that he was a brother of Pharnaces and son of the Mithradates who reigned B.C. 250—220, or to intercalate another Mithradates between Pharnaces and Philopator. Mithradates the Great (Eupator) was, therefore, not the grandson of Pharnaces, but either his nephew or his great-grandson.

This, at any rate, is the opinion of M. Reinach, and we are inclined to think that all numismatists will agree with him.

3. E. Babelon. Marcus Annius Afrinus, Governor of Galatia. The name of this official, together with his portrait, appears on a coin of Iconium, in Lycaonia. Without the portrait his name also occurs on other coins of the same city, and on several pieces of Pessinus, in Galatia, all belonging to the reign of Claudius.

4. M. Deloche. On Merovingian coins. *Tiers de sou d'or*, with the legend *Vico santi Remi* or *Remidi*.

5. E. Demole. On a denier bearing the name of Frederic, Bishop of Geneva, in the eleventh century.

6. A. Engel. On monetary imitations of Chateau-Renault.

7. E. Poncet. On an inedited coin of the Dauphiné.

The part concludes with notices of Head's *Historia Numorum*, Longpérier's works, Evans's *Debased Coinage bearing the name of Henry VIII*, and Lambros's mediæval coins of the dynasts of Chios.

The *Revue Numismatique*, 1887, Part III., contains the following articles.

1. H. B. Earle-Fox. On the Athenian obol and its fractions in the Macedonian epoch. Of these small coins the writer proposes the following new nomenclature :—

Owl r.	wt. 11·2 grs.	<i>Obol</i>	hitherto called	<i>Obol</i> .
Four crescents,	wt. 9·73 grs.	<i>Heptachalkon</i>	„ „	Tritartemorion.
Three crescents,	wt. 8·43 grs.	<i>Tritartemorion</i>	„ „	Pentachalkon.
Owl facing	wt. 7·0 grs.	<i>Pentachalkon</i>	„ „	Hemiobol.
Owl, r.	wt. 5·6 grs.	<i>Hemiobol</i>	„ „	Hemiobol.
Calathos,	wt. 4·2 grs.	<i>Trihemitetartemorion</i> .	„ „	Trihemitetartemorion.

2. E. Babelon. On a tetradrachm of Eretria. The writer here publishes a tetradrachm bearing the magistrate's name, ΔΑΜΑΣΙΑΣ, and what he takes to be an engraver's signature, ΦΑ, on the band which confines the back hair of the bust of Artemis on the obverse. He argues that this coin must belong to the period between B.C. 313 and 265. A comparison, however, of the piece in question with another tetradrachm, of which there is an electrotype in the British Museum, bearing the name ΧΑΡΙΔΑΜΟΣ, will convince most numismatists not only that the two coins are contemporary, but that they both belong to the period to which they are assigned in the *British Museum Catalogue*, Central Greece, p. lxx., viz. B.C. 196—146. If the newly-published tetradrachm had been reproduced by photography readers would have been better able to form an

opinion of the style and fabric of the piece than is possible from the outline sketch given in the text; but even this is sufficient to show that the coin is contemporary with the tetradrachms of Athens of the *new style*, on which the reverse type is enclosed in an olive-wreath. The fashion of surrounding the reverse type with a wreath is, if our memory serves us rightly, quite unexampled in the period to which M. Babelon would assign the coin, whereas in the next century it is of frequent occurrence, cf. *B.M. Guide*, Plates XLI., 7; XLII., 11, 12, 20, 21; XLIII., 23—25, 32; XLVIII., 6, 7; XLIX., 10, 13—15; L., 17—20; LI., 25, 26; LII., 30; LIV., 9—12; LV., 16—18, 20, 21, 23—27; LVI., 30—32, 34, 36, &c., &c. Most, if not all, of these coins are subsequent to B.C. 220.


3. Th. Reinach. Essay on the numismatics of the kings of Bithynia. This is an article which deserves a fuller notice than we are able to give it on the present occasion. In this first instalment the author deals chiefly with the silver money of Nicomedes I, Prusias I, and Prusias II, in the classification of which he has little to add to what has already been published on the subject. We look forward to the completion of this essay for more light upon the obscure series of copper coins, which no one has yet succeeded in attributing with certainty to the reigns in which they were issued.

4. E. Lépaule. Marinianus and Saloninus.

5. L. Blancard. On the florin of Provence.

6. P. Lambros. On inedited coins of the Dukes of Naxos.

7. J. J. Guiffrey. The *Medal Mint*, a metallic history of Louis XIV and Louis XV, based on unpublished documents in the national archives. Part II. Engravers, Pierre Aury, Thomas Bernard, Carlsten, Cheron, Clerion, Dollin, Dufour, and the two Duviviers.

The part concludes with biographical notices, among which we may call especial attention to M. Ch. Robert's review of M. Mowat's article in the *Comptes rendus des séances de l'Académie des Inscriptions*, t. xiv., 1887, on the explanation of the monogram  on the reverse of certain bronze coins of the Emperors Constantine I, Licinius, and Martinianus, and of the Cæsars, Crispus, Constantine II, and Licinius II.

The *Annuaire de Numismatique*, March—April, 1887, contains the following articles :—

1. J. A. Blanchet. Documents illustrating the monetary history of Navarre and Béarn.

2. R. Serrure. The feudal mint of Lens, in Artois.

3. P. C. Robert. Coins, jetons, and medals of the bishops of Metz.

The part concludes with a list of the prices fetched at the famous sale of the collection of Roman gold coins of the Vicomte de Ponton d'Amécourt.

The *Annuaire de Numismatique*, May—June, 1887, contains the following articles:—

1. E. Revillout. Second letter to M. Lenormant on the coinage of Egypt. M. Revillout cites numerous Demotic papyri, in which mention is made of the rate of interest established by law in Egypt, whence it appears that 30 per cent., and not 12 per cent., as Letroune supposed, was the legal rate.

2. A. Oreschnikow. On a bronze coin of Mithradates the Great. *Obv.* Head of Asklepios, *Rev.* Serpent twined round a tree, and with the letters BA MI in the field.

3. E. Demole. On an unpublished aureus of the Emperor Quintillus, with reverse type FIDES MILIT.

4. P. C. Robert. Coins, jetons, and medals of the bishops of Metz.

5. A. de Belfort. On an unpublished aureus of the Emperor Postumus, with reverse type AEQVITAS AVG.

The part for July—August contains:—

1. A. de Belfort. Roman Imperial coins not described in Cohen's work.

2. A. Changarnier. On drachms of the Pictavi.

3. J. Hermerel. On the numismatics of Lorraine.

4. A. Puschi. The mint of the Patriarchs of Aquileia.

5. H. Sauvare. On an 'Alide dirhem of Gilan.

In the *Notizie degli Scavi di Antichità*, August, 1886, is a notice of a recent find of coins at Taranto, consisting of coins of Tarentum and staters of Philip and Alexander of Macedon, and in the same periodical (January, 1887) is an account of coins of Latium and Campania, found during the excavations on the site of the Temple of Diana at Nemi by Signor L. Borsari.

In the *Proceedings of the Society of Antiquaries* Mr. Cecil H. Smith has an article on gems bearing the figure of Apollo of Kanachos. Cf. the coins of Miletus.

In the *Revue Archéologique*, May—June, 1887, M. R. Mowat has an interesting paper, entitled *Inscriptions osques ornées d'images de monnaies*.
B. V. H.

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PROCEEDINGS OF THE NUMISMATIC SOCIETY.

SESSION 1886—1887.

OCTOBER 21, 1886.

JOHN EVANS, Esq., D.C.L., LL.D., F.R.S., P.S.A., President, in
the Chair.

The following presents were announced and laid upon the
table :—

1. *Jahrbücher des Vereins von Alterthumsfreunden im
Rheinlande.* Heft 81. From the Society.

2. Catalogue of Roman Consular and Imperial coins in the
coin-cabinet at Moscow. Part II. From the Directors.

3. An account of various silver and copper medals presented
to the North American Indians by the Sovereigns of England,
France, and Spain, from A.D. 1600 to A.D. 1800. From H. E.
Hayden, Esq.

4. Becker's dies of a Florin of Charles Robert, King of Hun-
gary, 1308—1342, and of another of Franciscus Redey, Prince
of Transylvania, 1658; a silver impression from the latter and a
lead impression of a third die. From J. W. Trist, Esq.

5. *Numismatische Zeitschrift*, 1886, Part I. From the Society.

6. Proceedings of the Society of Antiquaries of London,
November 1885 to July 1886. From the Society.

7. *Sitzungsberichte der Königlich Preussischen Akademie
der Wissenschaften zu Berlin.* Parts I—XXXIX, 1886. From
the Academy.

8. *Zeitschrift für Numismatik*. Part II, vol. xii. From the Editor.

9. *La Réforme monétaire en Egypte*, 1885. From E. Vincent, Esq. Cairo.

10. *Bulletin de la Société des Antiquaires de l'Ouest*. Parts I and II, 1886. From the Society.

11. *Revue Belge de Numismatique*. Parts III and IV, 1886. From the Numismatic Society of Belgium.

12. *Guida Numismatica Universale compilata da Francesco e Ercole Gnecchi*. From the Authors.

13. The Decline of the Sámánis and the rise of the Ghaznavis in Mawará-un-Nahr and part of Khurásán. By E. E. Oliver, Esq. From the Author.

14. What I believe. By Count Léon Tolstoi. From the Translator, Constantine Popoff.

15. The Museum, May—August, 1886. From E. A. Barber, Esq., M.A.

16. *Bulletin historique de la Société des Antiquaires de la Morinie*. Part 138. From the Society.

17. *Berliner Philologische Wochenschrift*. Nos. 1—42, 1886. From the Publishers.

18. *Mémoires de la Société royale des Antiquaires du Nord*. N. S. 1886. From the Society.

19. *Aarbøger for Nordisk Oldkyndighed og Historie*, 1886. 2nd Series, vol. i., Part II. From the Society.

20. A sketch of the coinage of the Mexican Revolutionary General Morelos. By L. H. Low, Esq. From the Author.

21. *Smithsonian Report*, 1884. From the Smithsonian Institution.

The following exhibitions were made:—Mr. Evans, an electrotypes of a large bronze medal of Henry VIII, preserved in the Antiken Cabinet at Vienna, having on one side the bust of the king, and on the other a crowned rose and the inscription RVTILANS . ROSA . SINE . SPINA; also a small silver

medallion of Gallienus with the reverse OB CONSERVATIONEM SALVTIS.

Mr. Durlacher, a rare half-sovereign of James I. with m.m. a bunch of grapes, and the word IACOBVS written IACBVS,—and Mr. Krumbholz, a money-changer's silver weight with the head of Elizabeth on both sides, and counter-struck with the silver mark for 1618.

Mr. J. G. Hall read a paper on the types, &c., of European mediæval gold coins, in which he traced the origin of the gold coinages in the principal European states. (See vol. vi, p. 212.)

Mr. Grueber read a paper on a unique and unpublished medal of Anthony Brown, first Viscount Montagu, recently presented by Mr. A. W. Franks to the British Museum. (See vol. vi, p. 204.)

Mr. G. Sim communicated a notice of a hoard of silver coins found in Aberdeen in May last. The hoard consisted of 12,236 pieces, comprising 11,741 English pennies of Edward I, II, and III, and 131 Scottish of Alexander III, Robert Bruce, and John Baliol; 140 foreign sterlings; and 224 illegible and fragmentary pieces. (See vol. vi, p. 247.)

NOVEMBER 18, 1886.

JOHN EVANS, Esq., D.C.L., LL.D., F.R.S., P.S.A., President, in the Chair.

George Deakin, Esq., Dudley B. Fay, Esq., and the Hon. G. Hill Trevor, were elected Members of the Society.

The following presents were announced and laid upon the table:—

1. Journal of the Institute of Bankers. Parts VI and VIII, 1886. From the Institute.

2. The Gloucester Mint. By J. Drummond Robertson, Esq. From the Author.

3. Publications de la Section historique de l'Institut royale de Luxembourg, 1885. Parts XXXVII and XXXVIII. From the Institute.

4. Archæologia Æliana. Part XXXII. From the Society of Antiquaries of Newcastle-upon-Tyne.

5. Bulletin mensuel de Numismatique, &c. By R. Serrure. From the Editor.

6. Berliner Philologische Wochenschrift. Parts XLIII—XLVI. From the Publishers.

7. Catalogue of Oriental Coins in the coin-cabinet at Moscow. Part III. From the Directors.

Sir H. Peek exhibited a gold medal commemorating the landing of William of Orange at Torbay, 1688 (*Medallic Illustrations*, p. 640), by the Flemish engraver R. Arondeaux.

Mr. Burstal exhibited six coins of Æthelred II, six of Cnut, one of Harold I, and one of Edward the Confessor. Several of these were varieties not noticed in Hildebrand's work, that of Edward being especially remarkable as a new type. The moneyer's name on this coin was SÆMÆR ON HIRTF (Hertford).

The President exhibited a sovereign of James I. with the bunch of grapes mint-mark.

Mr. Montagu, four very rare silver coin-weights of Elizabeth, James I, and Charles I.

Mr. Montagu read a paper on a penny of Æthelbald, the successor of Æthelwulf upon the throne of Wessex. The coin is similar to that engraved in Hawkins (*Silver Coins*, No. 168), but the name of the moneyer on Mr. Montagu's coin is TORHTVLF, while that upon the coin described by Hawkins is BEANMVND. (See vol. vii, p. 132.)

Mr. Hall read a paper on some mediæval coins of Milan with

the device of St. Ambrose on horseback brandishing a whip, and other peculiar types, such as that of a large serpent swallowing a child, a branch of a tree with two buckets suspended from it, &c. (See vol. vii, p. 237.)

DECEMBER 16, 1886.

JOHN EVANS, Esq., D.C.L., LL.D., F.R.S., P.S.A., President,
in the Chair.

J. W. Dorman, Esq., and J. Stewart Henderson, Esq., were
elected Members of the Society.

The following presents were announced and laid upon the
table :—

1. Berliner Philologische Wochenschrift, Nos. 47—50. From
the Publishers.

2. The Currency Question, by G. W. Revis, Esq. From the
Author.

Mr. H. Montagu was elected Vice-President by the Council in
the room of the late Ven. Archdeacon Pownall.

The President drew attention to the fact that the Numismatic
Society completed this month the fiftieth year of its existence,
it having been founded on the 22nd of December 1836, at a
meeting held in the rooms of the Royal Astronomical Society,
Dr. J. Lee being the first President.

Mr. Durlacher moved, and Mr. Webster seconded, a pro-
posal that the Society should strike a medal in commemoration
of the fiftieth anniversary of its foundation. The question was
referred to the Council.

Mr. B. V. Head exhibited, on behalf of the late Archdeacon
Pownall, a bronze medal, by Matteo Pasti, the pupil of Pisano,
of Isotta, third wife of Pandolfo di Malatesta, Lord of Rimini

and Fano, having on the reverse an angel descending from the sky, holding a wreath with the inscription, OPVS . MATHEI . DE . PASTIS . MCCCCXLVI, and on the obverse a portrait of Isotta and ISOTE . ARIMINENSI . FORMA . ET . VIRTUTE . ITALIE . DECORI.

Mr. Hall exhibited a "grosso" of Henry VII, of Luxembourg, 1309—1313, struck at Milan with the type of St. Ambrose, and another of the same mint with that of SS. Ger-vasius and Protasius.

Mr. Copp exhibited a gold medal of Maximilian II, struck in commemoration of his coronation in 1563.

The President read a paper on some rare and unpublished Roman coins in his own cabinet, which he exhibited. (See vol. vi, p. 265).

JANUARY 20, 1887.

R. S. POOLE, Esq., LL.D., Vice-President, in the Chair.

F. J. Thirlwall, Esq., was elected a Member of the Society.

The following presents were announced and laid upon the table :—

1. *Historia Numorum*. A Manual of Greek Numismatics. By Barclay V. Head. Oxford, 1887. From the Delegates of the Oxford University Press.

2. *Hawkins's Silver Coins of England*. Ed. R. L. Kenyon. Third edition, 1887. From the Editor.

3. *Journal of the Institute of Bankers*. Vol. vii, Part IX, and Vol. viii, Part I, with list of Members. From the Institute.

4. *Journal of the Royal Historical and Archæological Association of Ireland*. Vol. vii, No. 65. From the Association.

5. The Canadian Antiquarian and Numismatic Journal. Vol. xiii, No. 2. From the Numismatic and Antiquarian Society of Montreal.

6. *Revue Belge de Numismatique*, 1887. Part I. From the Numismatic Society of Belgium.

7. *Aarbøger for Nordisk Oldkyndighed og Historie*. 2nd Series, 1886. Band I, Heft III. From the Society of Northern Antiquaries, Copenhagen.

8. *Bulletin Historique de la Société des Antiquaires de la Morinie*. 139th livraison. From the Society.

9. *Berliner Philologische Wochenschrift*, 1886. Nos. 51 and 52, and 1887, Nos. 2, 3. From the Publishers.

Colonel H. H. Kitchener exhibited a "Medjedieh" struck by the late Mahdi and issued at Khartoum. It bears on the obverse the inscription in Arabic, "By order of the Mahdi," cleverly arranged so as to have the appearance of the Sultan's *tughra* or cypher, and on the reverse, in Arabic, "Struck in the year of the Hejra 1302." The whole piece bears a striking resemblance to the Turkish coin of the same denomination now issued at Cairo.

The other exhibitions were :—

Mr. H. Montagu. Four shillings of Henry VII, all varieties, two being of the "Septim" class.

Mr. Copp. A Tanner's ninepence and a copper farthing of Cromwell.

Mr. Webster. A silver medal of Cardinal Antoine Perrenot de Granvelle, Archbishop of Besançon, by Lione Lioni.

Mr. Krumbholz. A shilling of Elizabeth, counter-marked with the arms of Holland, a "wattled fence," and the letters G.B.

The Rev. G. F. Crowther. Forgeries of pennies of Ethered, Archbishop of Canterbury; of Alfred the Great, struck in London; and of John, struck at Durham.

A paper on the medals of the Popes Innocent VIII and Alexander VI, written by the late Archdeacon Pownall, was

read. All the medals described in the paper had been previously published, but the writer explained their types more fully than has been hitherto done. (See vol. vii, p. 160.)

FEBRUARY 17, 1887.

JOHN EVANS, Esq., D.C.L., LL.D., F.R.S., P.S.A., President,
in the Chair.

Messrs. J. H. André, G. J. Bascom, A. Bom, L. H. Low, W. Ransom, W. T. Ready, H. P. Smith, and Captain R. H. C. Tufnell were elected Members of the Society.

The following presents were announced and laid upon the table :—

1. *Annuaire de Numismatique*. November—December, 1883. From the French Numismatic Society.

2. *Foreningen til Norske Fortidsmindesmerkers Bevaring*, 1885, with *Kunst og Haandverk*, Part VI, 1886. From the Society of Northern Antiquaries.

3. *Jahrbücher des Vereins von Alterthumsfreunden im Rheinlande*. Part LXXXII. From the Society.

4. *Journal of the Historical and Archæological Association of Ireland*. No. 66, 1886. From the Association.

5. *Journal of the Institute of Bankers*. Vol. viii, Part II. From the Institute.

6. *Archæologia Cantiana*. Vol. xvi. From the Kent Archæological Society.

7. *Bulletin des Procès-Verbaux de la Société d'Émulation d'Abbeville*, 1885. From the Society.

8. *Bulletin mensuel de Numismatique et d'Archéologie*. By R. Serrure. From the Editor.

9. Bulletin Historique de la Société des Antiquaires de la Morinie. N.S., 143^{me} livraison. From the Society.

10. Berliner Philologische Wochenschrift. Nos. 4—7, 1887. From the Publishers.

11. The Journal of Hellenic Studies. Vol. vii, No. 2. Text and Plates. From the Hellenic Society.

12. A Series of Articles on Indian Antiquities and Coins, by Surgeon-Major O. Codrington. Reprinted from the Journal of the Bombay Branch of the Royal Asiatic Society. From the Author.

Mr. Evans exhibited a large brass coin of Domitian of his eleventh consulship, having on the reverse Pax holding a cornucopiæ and a torch, standing towards the left and setting fire to a trophy of arms; also an uncertain bronze coin of Julius Cæsar, with his head on the obverse accompanied by a star, and on the reverse a barbarous inscription, CASER IVLIVS, in a laurel wreath.

Mr. Montagu exhibited a large bronze coin of Rhodes, *obv.* head of young Dionysus, *rev.* ΕΠΙ ΕΥΔΟΠΟΥ ΡΟΔΙΩΝ, Nike alighting on a globe, holding wreath and palm; also a gold octadrachm of Ptolemy II (Philadelphus), similar to figure 379 of Head's *Historia Numorum*.

Mr. Hall exhibited a series of Roman imperial aurei selected with the object of showing the resemblances of the portraits of different members of the same family.

Mr. B. V. Head read the first portion of a paper by Canon Greenwell on the electrum coinage of Cyzicus, in which he gave an account of the early history of the town, of its various religious cults, and of the growth and extension of its commerce in the fifth and fourth centuries B.C., especially with regard to the practical monopoly which it so long enjoyed of coining electrum staters. (See vol. vii, p. 1.)

MARCH 17, 1887.

H. MONTAGU, Esq., F.S.A., Vice-President, in the Chair.

Messrs. Charles E. Mackerell and Charles Spink were elected Members of the Society.

The following presents were announced and laid upon the table:—

1. A Guide to English Pattern Coins from Edward I. to Victoria. By the Rev. G. F. Crowther, M.A. From the Author.

2. Aarbøger for Nordisk Oldkyndighed og Historie, 1886, 2nd Series, vol. vii, Heft IV. From the Society of Northern Antiquaries.

3. Sitzungsberichte der Königlichen Preussischen Akademie der Wissenschaften zu Berlin. Parts XL—LIII. From the Academy.

4. The Journal of the Royal Historical and Archæological Association of Ireland. Vol. vii. Series IV., No. 67. From the Association.

5. Berliner Philologische Wochenschrift. Nos. 8—11, 1887, From the Publishers.

6. The Medals, Jetons, and Tokens illustrative of Obstetrics and Gynaecology. By H. R. Storer, A.M., M.D. From the Author.

7. Transactions of the Royal Irish Academy. Vol. xxvii, Nos. 6—8; vol. xxviii, Nos. 21—25; and Cunningham Memoirs, Nos. 2 and 3. From the Academy.

8. Proceedings of the Royal Irish Academy. January—July, 1886, No. 5, Science, and No. 7, Literature. From the Academy.

9. Bronze medal commemorating the visit of Prince Albert Victor of Wales to the City of London, June 29, 1885. From the Corporation.

Mr. Montagu exhibited two large medals by Massimiliano Soldani-Benzi, of Florence, one being of Dr. J. Inglis, cast in

1703, the other, cast in 1709, being of H. Newton, the Ambassador Extraordinary for Britain to the Grand Duke of Tuscany and to the Republic of Genoa. Mr. Montagu remarked upon the close similarity in the design of these two medals, which are the only specimens of the work of Soldani-Benzoni in the British series.

Mr. J. Brown, Q.C., exhibited a tetradrachm of Mithridates Eupator with the date HΞ of the Pontic era = B.C. 90, the type of which was the drinking Pegasus.

Mr. Montagu read a paper on the so-called "farthings" of Queen Anne inscribed BELLO ET PACE, 1713, which have on the reverse a figure of Britannia standing, holding an olive branch and a spear, and which he regarded as being merely jetons. (See vol. vii, p. 139.)

APRIL 21, 1887.

JOHN EVANS, Esq., D.C.L., LL.D., F.R.S., P.S.A., President,
in the Chair.

W. H. Taylor, Esq., was elected a Member of the Society.

The following presents were announced and laid upon the table:—

1. Zeitschrift für Numismatik. Band xiv, Parts III, IV. From the Editor.

2. The Journal of the Institute of Bankers. Vol. viii, Part IV. From the Institute.

3. Berliner Philologische Wochenschrift. Nos. 12—16. From the Publishers.

4. Revue Belge de Numismatique, 1887, 2nd livraison. From the Society.

5. Bulletin de la Société des Antiquaires de l'Ouest, 1886, 4^e trimestre. From the Society.

6. Smithsonian Report, 1884, Part II. From the Smithsonian Institution.

7. Proceedings of the Society of Antiquaries of Scotland, 1885—6. N.S., vol. viii. From the Society.

8. Autotype fac-similes of coins produced at the Birmingham Mint. From Messrs. Ralph Heaton and Sons, Birmingham.

9. Formes et caractères des médaillons antiques de bronze relatifs aux Jeux. By M. Ch. Robert. From the Author.

10. Les noms de Cologne en latin et dans les langues modernes. By M. Ch. Robert. From the Author.

11. A modern imitation of a tetradrachm of Eucratides of Bactria. From General G. G. Pearse, C.B., R.H.A.

Mr. A. J. Evans exhibited a tetradrachm of Syracuse similar to the one described in the *Brit. Mus. Cat.*, No. 188, and with the signature of the engraver Evaenetus on both sides; on the obverse upon one of the dolphins, and on the reverse upon a tablet carried by the flying Nike.

Mr. Webster exhibited an angel of the first coinage of Henry VII; also a Greek imperial coin of the town of Baris, in Pisidia, struck in the reign of Gordian III., with a figure of Hermes seated, holding a caduceus, on the reverse; also a small brass coin of Trajan with busts face to face of Plotina and Marciana on the reverse, and the legend PLOTINA ET MARCIANA AVG. This piece was countermarked with a capricorn, and is attributed to the colony of Parium, in Mysia.

Mr. Krumbholz exhibited a half-crown of Charles I, probably a variety of the so-called "Blacksmith" money struck in Ireland.

Mr. C. H. Nash exhibited a cast of a pattern halfpenny of Elizabeth, a counterfeit half-crown of William and Mary, and other false coins.

Mr. C. F. Keary read a paper on the earliest Scandinavian coinages, being a translation of a paper on the subject by Dr. Hans Hildebrand, of Stockholm, with some additional remarks by the translator. It is printed in vol. vii, p. 222.

MAY 19, 1887.

JOHN EVANS, Esq., D.C.L., LL.D., F.R.S., P.S.A., President,
in the Chair.

Captain C. H. J. Hopkins, E. C. Mitchell, Esq., and A. Prevost, Esq., were elected Members of the Society.

The following presents were announced and laid upon the table:—

1. Contributions to the Study of Indo-Portuguese Numismatics, Parts II—IV. By M. J. Gerson de Cunha. From the Author.

2. Journal of the Royal Historical and Archæological Association of Ireland. Nos. 68, 69, 1887. From the Association.

3. Μεσαιωνικά νομίσματα τῶν Δυναστῶν τῆς Χίου ὑπὸ Π. Λάμπρου. From the Author.

4. Annuaire de la Société Française de Numismatique et d'Archéologie. Mars—Avril, 1887. From the Society.

5. Report and Proceedings of the Numismatic and Antiquarian Society of Philadelphia, 1887. From the Society.

6. Berliner Philologische Wochenschrift. Nos. 17—20. From the Publishers.

7. Coins supplementary to Mr. Thomas's Chronicles of the Pathan Kings of Delhi, No. IV. By C. J. Rodgers, Esq. From the Author.

8. Journal of the Institute of Bankers. Vol. viii, Part V. From the Institute.

Mr. W. T. Ready exhibited a remarkable gold stater of Lamp-sacus, having on the obverse a very fine head of Zeus, with a thunderbolt at his shoulder, and on the reverse the usual half Pegasus.

Mr. Evans exhibited a selection of fine Roman gold coins of

the following empresses : Domitia, Marciana, Matidia, Sabina, Crispina, Manlia Scantilla, Didia Clara, Julia Domna, Plautilla, Magnia Urbica, Galeria Valeria, and Fausta.

Mr. Hall exhibited aurei of Caligula, Sept. Severus, and Gallienus. Most of these coins were acquired at the recent sale in Paris of the magnificent collection of the Vicomte de Ponton d'Amécourt. Mr. Hall also exhibited a pale gold coin of Dorstat belonging to the class of Carolingian imitations described by Mr. Keary at the last meeting of the Society.

Mr. Durlacher exhibited two pennies of Edward the Confessor, one struck at Bedford, and reading LIOFTHEGEN ON BEDE, type, a combination of Hawkins's 227 and 222; the other struck at Gloucester, of the so-called sovereign type reversed.

Mr. Montagu exhibited a sixpence of the Commonwealth dated 1659 (mint mark, anchor), a coin which is important as proving that money was struck in that year, a fact doubted both by Hawkins and Kenyon. Mr. Montagu also exhibited a penny of Harold II, of the "Pax" type, struck at Worcester, and reading LEOFRIC ON PIRE.

Mr. B. V. Head read a paper by M. J. N. Svoronos on the enigmatical inscription *Τίονροι*, which occurs in archaic characters written across the field on certain coins of Gortyna, in Crete. (See vol. vii, p. 126.)

Mr. Evans read the abstract of a paper lately communicated to the Académie des Inscriptions by Mr. R. Mowat, on the hitherto unexplained inscription $\begin{smallmatrix} X \\ ||\Gamma \end{smallmatrix}$ on coins of the time of Constantine, which he interpreted as standing for "Decima (pars) sestertii."

JUNE 16, 1887.

ANNIVERSARY MEETING.

JOHN EVANS, Esq., D.C.L., LL.D., F.R.S., P.S.A., President,
in the Chair.

The Minutes of the last Anniversary Meeting were read and confirmed.

The Report of the Council was then read to the meeting as follows :—

GENTLEMEN,—The Council again have the honour to lay before you their Annual Report as to the state of the Numismatic Society.

With great regret they have to announce their loss by death of eight ordinary members :—

W. Brice, Esq.

Admiral Sir George N. Broke Middleton, Bart., C.B.

The Right Hon. the Earl of Enniskillen, D.C.L., F.R.S., F.G.S.,
M.R.I.A.

The Hon. James Gibbs, C.S.I., C.I.E.

W. E. Hayns, Esq.

M. le Baron Lucien de Hirsch.

The Ven. Archdeacon Pownall, M.A., F.S.A.

Major W. Stewart Thorburn, A.P.D.

On the other hand the Council have much pleasure in recording the election of twenty new ordinary members :—

J. H. André, Esq.

G. J. Bascom, Esq.

M. A. Bom.

G. Deakin, Esq.

J. W. Dorman, Esq.

D. B. Fay, Esq.

J. S. Henderson, Esq.

Capt. C. H. J. Hopkins.

L. H. Low, Esq.

C. E. Mackerell, Esq.

E. C. Mitchell, Esq.

A. Prevost, Esq.

W. Ransom, Esq.
 W. T. Ready, Esq.
 H. P. Smith, Esq.
 C. Spink, Esq.

W. H. Taylor, Esq.
 F. J. Thirlwall, Esq.
 Capt. R. H. C. Tufnell.
 Hon. G. Hill Trevor.

According to our Secretary's Report our numbers are, therefore, as follows :—

	Ordinary.	Honorary.	Total.
June, 1886	230	36	266
Since elected	20	—	20
	250	36	286
Deceased	8	—	8
Resigned	—	—	—
Erased	—	—	—
June, 1887	242	36	278

The Council have also the honour to announce that they have awarded the medal of the Numismatic Society in gold, to the President of the Society, John Evans, Esq., D.C.L., LL.D., F.R.S., P.S.A., for his distinguished services to the science of Numismatics, exemplified by nearly seventy papers on Roman, British, Saxon, and English coins contributed to the pages of the *Numismatic Chronicle*, and by his standard work on the *Coinage of the Ancient Britons*.

The Treasurer's Report is as follows :—

At the conclusion of the reading of the Report, Mr. Montagu, V.P., addressed the President as follows :—

Mr. Evans,—In the year 1883 you originated, as President of this Society, the institution of an annual Medal, of which you generously presented the dies to the Society.

As each recurring year necessitated the nomination of a fitting recipient of this medal, the Council, with whom the selection rests, has been of opinion that you were, yourself, entitled to the benefit of that selection, but you have always insisted, with greater modesty than justice, that the preference should be given to some other eminent numismatist of whom in each case it could be fairly stated that his claims were second only to those of yourself.

In this the Jubilee year, not only of the reign of our most gracious Sovereign but also of our own Society, you have been unable longer to resist the views and importunities of the Council, and I have very much pleasure in being deputed by them to present the Medal to you, on their behalf. It has been thought well that on this occasion it should be struck in gold in special commemoration not only of the auspicious nature of the year, but also of the very important services which you have rendered to the Society over a long course of years, in your capacity first as Honorary Secretary and afterwards as President.

Your indefatigable labours in the cause of Numismatic Science are widely known and appreciated both here and abroad, and there is no student of that science, particularly in connection with our English series, who is not deeply indebted to you for the recorded results of your energy and research. You were the first, practically to formulate, and certainly to put into useful shape, those morphological theories which finally led to a complete exposition on your part of the *History of the Coinage of the Ancient Britons*, a work which will ever remain the standard authority on that subject.

You have also, in the pages of the *Numismatic Chronicle*,

elucidated the very abstruse questions connected with the distinctions between the coins of Henry II, Richard I, John and Henry III, involving the settlement, final to this day, of what was formerly called the "Short-cross Question." You have lately, also, through the same medium, cleared up the equally difficult points involved in the discussion as to where the coinage of Henry VIII ends and where that of Edward VI commences. In addition to these important contributions, you have from the year 1849, when you first joined this Society, up to the present time, written many valuable papers on other subjects affecting English Numismatics and you have particularly described with interesting and instructive comments many finds of coins, amongst the most important of which have been those of Anglo-Saxon pennies in the City of London and in various parts of Ireland, and the two several finds of gold coins at St. Albans.

In connection with the latter of these your exertions with regard to the law of Treasure Trove in this country have borne fruit in the shape of the new Regulations of the Treasury, which, though scarcely adequate to the emergencies of the day, constitute an appreciable improvement upon the law as it stood.

You have also written ably and usefully on the still more complicated subject of ancient Jewish coins, and have contributed most valuable notes on the ancient Roman series, of which you possess so important a collection. Your assistance has also always been afforded without stint or jealousy to other writers on germane subjects, and your advice has been at the service at all times of all interested in antiquarian lore. In these and other departments of science the fact that you are Treasurer of the Royal Society and President of the Society of Antiquaries is conclusive not only as to your merits but also as to the appreciation of these by your fellow-workers. Your treatises on the Ancient Stone Implements, Weapons, and Ornaments of Great Britain, and on the Bronze Implements and Ornaments of Great Britain, will ever be standing records of

your own powers of research and of incalculable aid to those of others. Nor have academical and other honours been wanting. You have received special distinctions from more than one University and your practical abilities have secured to you a high position in your county and in connection with other vocations in which you have been actively engaged.

I could add greatly to this varied but necessarily imperfect summary of the result of your versatile talents, but will now content myself by expressing a hope, on behalf of our Society, that you may enjoy a long life, with such health of mind and body as will enable you worthily to preside in the future, as you have in the past, over our deliberations; and I trust that you may derive some pleasure in being the possessor of this medal, the presentation of which is but an inadequate token of appreciation on the part of those with whom you have always worked so loyally and effectually.

In reply Mr. Evans said:—

I accept with gratitude the high compliment paid me by the Council, which has now met with the approbation of the Society, in selecting me as the recipient of this medal. When, in 1883, I presented to the Society the dies for an honorary medal, provision was made that a member of the Council was not disqualified to be the recipient in case it was awarded by the unanimous vote of that body. I little thought, however, that I should be the first to come under this exceptional provision, and that a further exception to our ordinary course would be made by striking the medal in gold. As to how far I am deserving of the honours thus paid me, you may accept Mr. Montagu's kind estimate or not. For myself I shall always value the medal as a memorial of the goodwill of a Society with which I have been connected for a period of more than eight-and-thirty years and in which it has been my good fortune to have numbered many firm and fast friends, and by which in the capacity of its Secretary or President I have

always been treated with the utmost kindness and consideration.

The President then delivered the following address.

In addressing you upon the present occasion I need hardly remind you that the current year, 1887, is the Jubilee year not only of Her Most Gracious Majesty the Queen, whom may God long preserve, but of our own body, the Numismatic Society of London.

The formation of such a society was proposed and discussed at preliminary meetings held at the residence of the late Dr. John Lee, at Doctors' Commons, on June 27 and December 1, 1836, and it was finally resolved at a meeting of the friends of numismatic science, held in the apartments of the Royal Astronomical Society on Thursday evening, the 22nd of December, 1836, "That a Numismatic Society be formed." The first President was John Lee, Esq., LL.D., F.R.S., who was also the treasurer. The secretaries were John Yonge Akerman, F.S.A., and Isaac Cullimore, M.R.S.L., and C. F. Barnwell, F.R.S., F.S.A.; Thomas Burgon, Sir Henry Ellis, F.R.S., F.S.A.; W. D. Haggard, F.S.A., F.R.A.S.; Edward Hawkins, F.R.S., F.S.A.; Captain W. H. Smyth, R.N., F.R.S., F.S.A.; and William Wyon, A.R.A., were appointed Members of the Council.

The first ordinary meeting of the Society was held on Thursday, the 26th January, 1837, and from that day to the present our meetings have continued to be held at their regular stated intervals.

On June 15, 1887, Dr. Lee delivered what may be termed the first anniversary address, and at that date the ordinary Members of the Society numbered a hundred and thirteen, of whom, I believe, that only one now survives, our honorary member and medallist, Mr. C. Roach Smith, F.S.A. For some years after its institution the Society did not publish its own transactions, but, by arrangement, they were left for publication

by Mr. Akerman, who had already, in June, 1836, commenced the issue of the *Numismatic Journal*, of which the last part, completing a second volume, appeared in April, 1838.

In 1839 began the issue of the first series of the *Numismatic Chronicle*, and at the Annual Meeting on the 19th July of that year the number of ordinary members amounted to 155. At this period the meetings of the Society were held, by permission, in the rooms of the Royal Astronomical Society, but, in 1841, apartments for the Numismatic Society were secured in Exeter Hall. In 1842, however, it migrated to rooms in Tavistock Street, Covent Garden. In 1843 the number of members began considerably to fall off, being reduced to 132, and in 1846 this had fallen to 123. In 1849, the year in which I became a member of the Society, we numbered 106 only. In 1851 our numbers were still farther reduced to 93, and in 1854, when I became one of the secretaries of the Society, we mustered but 82 ordinary members. In 1856 the fortunes of the Society had fallen still lower, and our President, the late Mr. Vaux, made the liberal offer that the Society should for the future meet in his rooms at 13, Gate Street, Lincoln's Inn Fields.

In June, 1859, we attained our lowest point of 59 members ; but in 1861, when the *Numismatic Chronicle* was taken into the hands of the Society, and a vigorous effort was made to re-establish it, our numbers had increased to 71.

By 1863 we had risen in number to 103. In 1871, after the completion of the first ten volumes of the Second Series of the *Numismatic Chronicle*, our number was 141. In 1874 the Society again changed its domicile to apartments in the house of the Royal Society of Literature, 4, St. Martin's Place, thanks mainly to the kindness of our then President, Mr. Vaux. It was in that year that I became your President, and at the Anniversary Meeting our members were returned as 153. In June, 1881, after the completion of the twenty volumes of the Second Series of the *Numismatic Chronicle*, I recited some of

the statistics I have now given, and called attention to the satisfactory circumstance that the number of our ordinary members then amounted to 199. Since that time we have again changed our home to the convenient apartments we now occupy, under the Royal Asiatic Society, in Albemarle Street, for which also we were mainly indebted to the late Mr. Vaux, and, as you have just heard from the Report of the Council, our ordinary members are now 242 in number, or fully four times what they were in 1859.

I think that I may fairly congratulate the Society on this remarkable growth in its numbers, of which probably its own activity has to a great extent been the cause.

Looking back upon what we have done, we may with justice take credit for the greater part of the two volumes of the *Numismatic Journal*, and of the twenty volumes of the first series of the *Numismatic Chronicle*, while the whole of the twenty six volumes of which the second and third series are composed are entirely our own. We may, I think, also with some satisfaction, point to the quality of much of the matter in the *Chronicle*, which will, I think, well bear comparison with that in any of the analogous foreign journals. I will not attempt to specify particular articles, but all will agree that our scientific knowledge of classical and English numismatics has made material advances within the last thirty years, and that these have been mainly due to the members of this Society and to the contributors to the pages of the *Numismatic Chronicle*. Omitting the names of those who are still among us, I may cite such authorities as Akerman, Bergne, Birch, Borrell, Burgon, Haigh, Henfrey, Lindsay, Sainthill, de Salis, Thomas, and Vaux, whose reputation as numismatists is in many cases not confined to this country.

There is another point in connection with the Jubilee of the Society which also must be mentioned, although, through no act of my own, it has assumed a somewhat personal character. The Council in December last determined that it would be a fitting memorial of the Numismatic Society's Jubilee, if a medal were

struck in honour of the occasion, which should be distributed among its members. A design was proposed by which the Jubilee of her Majesty would have been commemorated on the obverse, where her portrait would have appeared, and the Jubilee of the Society would have been recorded on the reverse. The Council, however, with what I am afraid may appear greater loyalty to their President than to their Sovereign, determined that the portrait and name of your President should be shown on the obverse, alleging as a precedent that when the Society was founded a medal was struck with the portrait of its first President, Dr. Lee. Into the discussion of the subject I could hardly enter, and I found myself in a contemptible minority in upholding the first design.

The Jubilee year of her Majesty's reign will be commemorated by the issue of a new coinage, on which the youthful portrait that has now been in use for a period of fifty years will be superseded by one more in accordance with her Majesty's present age. This portrait is in the main taken from that by Mr. Boehm, designed for the large commemorative medal, but has suffered much in the reduction, mainly owing to the proportions of the frill of the veil to the veil itself, and of the head to the neck and shoulders, not having been successfully preserved. So far as denominations are concerned the principal novelty is the introduction of a double florin or four-shilling piece, of which the utility has still to be tested. The device on the reverse of this piece reproduces the design of Simon for the large gold coins of Charles II, and the reverse types of the other coins are, with the slightest variations, reversions to types which have been in use within the present century. One of these variations is in the shape and character of the crown, which appears to be but a doubtful improvement. It seems unfortunate that so favourable an opportunity for introducing really new designs on the reverse of our coins should have been lost, and I cannot but think that some communication between the Master of the Mint and the Council of this Society

on the subject of both the obverse and reverse designs might possibly have been advantageous. Mr. C. Roach Smith, in a memorial to H.R.H. the Prince of Wales, has advocated the adoption of designs having reference to some of the chief events of her Majesty's reign, and though the exigencies of commerce require a stereotyped uniformity in the types of our coins, yet something might have been done in the direction thus indicated, so that we might at all events have been spared from a reintroduction of the obsolete armorial designs of the great re-coinage of 1816.

In my anniversary address of last year I expressed a hope that the question of treasure-trove might be reconsidered by the Government, and this hope has now been fulfilled. The new regulations, however, while recognising the archæological value of objects found as being the basis of remuneration to the finder, distinctly inform him that he is not to receive the full market value of the articles retained for our national collections. As I have already commented in the pages of the *Numismatic Chronicle*¹ on the short-sighted policy involved in these regulations I will not detain you longer on this subject.

I therefore address myself to a short review of the work accomplished by the Society during the past year. The attendance at our meetings and the number of objects of interest exhibited at them has, I think, been somewhat above the average, but there appears to have been a slight falling off in the number of papers communicated, though perhaps not in their importance. In Greek numismatics Canon Greenwell has favoured us with an exhaustive memoir on the electrum coinage of Cyzicus, in which, besides recording the political history of that town and giving details of its mythology, he has described not less than a hundred and seventy-two examples of the stater and its subdivisions, nearly all of which can without hesitation be referred

¹ Vol. vi, 3rd Series, p. 176.

to Cyzicus. When we consider that this coinage was absolutely unknown to Eckhel, the advance that has been made in certain departments of numismatic knowledge since his days is strongly borne in upon us; and though there are questions relating to the meaning of some of the types, the relative value of the coins to those of pure gold in circulation at the same time, and perhaps many other points, the catalogue and details furnished by this memoir render it the repertory of all that is at present known, and the starting-point for future investigations as to this interesting series.

Professor Gardner has made us acquainted with the principal Greek coins acquired for the British Museum in 1885, among which are some remarkable pieces. It is much to be regretted that the limited purchasing power of the Museum has this year been still further reduced, but to this point I shall recur later on.

Mr. Svoronos has communicated some notes with regard to an inscription on some coins of Gortyna which by Sestini has been read as **ΜΥΝΟΤΑΥΡΟΣ**, but which Mr. Wroth had published as more probably **ΤΙΣΥΡΟΙ**. Mr. Svoronos regards this as an epithet of the Gortynians like that of the **ΚΡΗΤΕΣ ΙΕΡΑΠΥΤΝΟΙ ΑΞΙΟΙ**, &c.

In Roman numismatics not much has been done. One of our foreign members, M. Charles Robert, has called attention to an explanation offered by M. R. Mowat of the symbol **X**
III which occurs on some of the coins of the Constantine period and which he interprets as Decima (pars) sestertii. The suggestion seems plausible, but it may be urged against its acceptance that the symbol is not of general occurrence on the coins of a particular weight, but is confined to the issues of two or three Eastern mints.

The only other paper on the Roman Imperial coins was one by myself, in which I gave an account of a few rare or unpublished coins in my own collection, principally of gold.

Among them were two unpublished aurei of Carausius and Allectus.

On the Saxon coinage our only communication was from the pen of Mr. Montagu and related to the rare coinage of Æthelbald of Wessex, the existence of which had by some been doubted, as it rested on the authority of an engraving made under the auspices of the notorious John White. Dr. Combe, however, was satisfied as to the authenticity of the coin, the moneyer's name on which was BEANMVND. In confirmation of Dr. Combe, Mr. Montagu cites two coins of the same type but struck by TORHTVLF, one of which was in his own collection and the other in that of Mr. Brice, though now both in Mr. Montagu's possession.

Another paper by the same author relates to the so-called BELLO ET PACE farthing of Queen Anne, and entirely disposes of its claim to be regarded as a coin of the realm or as a pattern-piece, and relegates it to the category of medalets or jetons.

An unpublished medal of Anthony Brown, first Viscount Montagu, presented by Mr. Franks, with his usual liberality, to the national collection, forms the subject of a paper by Mr. Grueber, in which he gives some interesting particulars of the diplomatist and warrior in whose honour the medal was cast. Mr. Grueber is inclined to regard Trezzo, whose medal of Mary is well known, as the artist who designed this of Viscount Montagu.

A most useful Index to the Personal Medals in the British Museum of later date than the accession of George III, has been furnished to us by Mr. Warwick Wroth, and forms a convenient and valuable supplement to the *Medallic Illustrations* up to the death of George II by Messrs. Hawkins, Franks and Grueber, published by the Trustees of the British Museum in 1885.

Another paper relating to medals was one by the late Archdeacon Pownall, which did not come before us until after his lamented decease. It related to medals of Innocent VIII and

Alexander VI, and though the types described were already published, the paper contained much of historical and personal interest. It is sad to think that it closes the series of these papers, and that the Society has lost one of the most constant and instructive contributors to its Journal.

In illustration of the types and of the morphology of coins we have had a suggestive paper from Mr. Hall on the gold coinage of Mediæval Europe, and Mr. Keary has furnished us with an abstract of Dr. Hans Hildebrand's paper on the earliest Scandinavian coinage. The modifications of the Dorstat type of the coins of Charlemagne afford another remarkable instance of the changes which may result from successive imitations of a type which has to a great extent lost its original signification.

We have had some accounts of recently discovered hoards brought before us, including one by Mr. Sim of the remarkable find at Aberdeen of upwards of 12,000 silver coins, mostly of our three first Edwards.

Mr. Stanley Lane Poole has continued his *Fasti Arabici*, and has given us notes on the collections of Mr. Leggett and Col. Stewart, as well as a notice of the Oriental coins in the library at Christ Church, Oxford. We have, therefore, had brought under our notice no inconsiderable number of subjects; but I must take this opportunity of again impressing upon our members that without a sufficient amount of material it will be impossible for the *Numismatic Chronicle* to continue to appear with its wonted regularity; and I would suggest that those who are pursuing any special branch of numismatic study should take the earliest opportunity of making the Society acquainted with the result of their labours.

I must now turn to the sadder part of my duty on this occasion, and say a few words with regard to those who have been removed from among us by death.

In Archdeacon Assheton Pownall we have lost an ardent numismatist, and a constant contributor to the pages of the *Numismatic Chronicle*. He was the third son of James Pownall,

Esq., of Liverpool, and was born in 1822. He received his education at Harrow, under Dr. Wordsworth, and subsequently proceeded to Brasenose College, Oxford, where he graduated in 1845. In that same year he was ordained by Bishop Lonsdale, of Lichfield, and after serving the curacy of Edgmond, Shropshire, for two years, he was presented by the Lord Chancellor Cottenham to the rectory of South Kilworth, Leicestershire, which was his home for the rest of his life. The population of his parish never exceeded 500, so that he felt at liberty to undertake useful work outside its limits. For many years he represented the Society for the Propagation of the Gospel in Foreign Parts, and visited, on their behalf, most of the towns and villages of the Midland Counties. In 1867 he was appointed Rural Dean of Gartree; in 1875 he was made an Honorary Canon of Peterborough; and he was Proctor in Convocation from 1871 till 1884, when he was made Archdeacon of Leicester, still remaining a Member of the House.

It is, however, with Archdeacon Pownall's numismatic career rather than with his ecclesiastical that we have now to do. He joined the Society in April, 1860, and from that time until the day of his death he took the warmest interest in its welfare. His communications to the Society and to the pages of the *Numismatic Chronicle* are too numerous for me to record here in detail, being nearly thirty in number. His first papers, beginning in 1861, related to the short cross coinage of Henry II and Henry III, and to a curiously defaced penny of Stephen. The subject of the short cross coinage was a favourite one with Archdeacon Pownall, and he more than once recurred to it. His list of the coins with the cross-pommée mint mark was, for instance, most instructive and complete. The subject of counter-marked coins was also one to which he paid much attention. He likewise brought before us notices of various finds of Roman and other coins, and raised the question as to the amount of Italian influence that could be traced on the coinage of Offa. On the coinage of the Edwards and the

Henrys he was no mean authority, some important boards of the fourteenth and fifteenth centuries having passed through his hands. Of these he gave detailed accounts in the *Numismatic Chronicle*. His paper¹ on the royal bust on early groats, connecting the representation of the monarch showing his neck and shoulders naked with the ceremony of unction at the Coronation, exhibited great ingenuity, and also went to prove that the knowledge of subjects apparently most remote from numismatic science may assist in throwing an unexpected light upon some hitherto unobserved or mysterious detail.

On the coins issued from the mint at Stafford Archdeacon Pownall's paper, published in 1880, furnishes the most complete list that has hitherto been compiled. His inquiry in the following year, *Have we no Irish Coins of Edward VI?* I venture to believe that I have been able to answer, and in doing so I have fully borne out Archdeacon Pownall's suggestion, and shown that there were large issues from the Dublin mint during the reign of Edward VI, though the coins were struck with the image and superscription of his father, Henry VIII. Of late his attention had been principally directed to the series of Papal medals, especially those of the fifteenth century, on which he contributed a succession of interesting and instructive papers to the Society. The last literary work on which he was engaged was the paper that will appear in the forthcoming part of the *Chronicle*. His decease took place almost suddenly at Dover in November, 1886. Archdeacon Pownall was a Fellow of the Society of Antiquaries, and for some years its local secretary for Leicestershire, and in that capacity gave accounts to the Society of various discoveries of antiquities in the Midland Counties. As many of our members well know, he was a man of the most genial disposition, always anxious thoroughly to perform whatever he undertook, enthusiastic in his appreciation of all that was of numismatic or antiquarian interest, a keen

¹ *Num Chron.* N.S., vol. ix, 203.

observer, and one who made, but never lost, friends. His services to the Society while a member of the Council were most valuable, though unobtrusively rendered, and if the medal, of which I have the honour to be the recipient this year, is ever productive of good to numismatic science, it must not be forgotten that its foundation, as I stated in 1883, was in the main due to the judicious suggestions of Archdeacon Pownall. Of the affection in which he was held by his parishioners and neighbours this is hardly the place to speak. It is testified by a memorial window, placed in the chancel of South Kilworth Church, which was so long the scene of his labours.

The Right Honourable William Willoughby Cole, third Earl of Enniskillen, was born on the 25th January, 1807, and died on the 12th November, 1886. He was elected into this Society in May, 1861, and for many years took a warm interest in its welfare, frequently serving on the Council, and as one of its Vice-Presidents. His numismatic tastes were principally in the direction of the coinages of foreign countries, in the collection and arrangement of examples of which he materially aided the British Museum. As a geologist, and especially as a collector of fossil fish, he was widely known, and so long ago as 1828, when still Viscount Cole, he became a Fellow of the Geological Society. For many years before his decease his eyesight began to fail, but until the last he maintained his interest in his favourite pursuits, and rejoiced in opportunities of discussing them. His almost gigantic frame, his genial smile, and his merry laugh will long be remembered by those with whom he was brought in contact, and probably other members of the Society besides myself will cherish a remembrance of the kind and hearty hospitality with which friends were received in the fine old family seat of Florence Court.

Lieutenant-Colonel William Stewart Thorburn had been a member of this Society since January, 1884, only. He had, however, for many years been an ardent numismatist, having been a collector from his early youth. He was the eldest son

of the late James Thorburn, Barrister-at-Law, and Mary Anne, daughter of William Stewart, of Shambellie, Dumfries, with which district his family has been connected for several generations. He was born in 1838, and was educated at Dumfries and Edinburgh. In 1858 he entered the army as ensign in the 1st Royal Scots, and after serving in India and elsewhere for some years he joined the Army Pay Department, in which he gained considerable financial experience. He subsequently again served in India and in other parts of the world, rising through the various grades in his profession until, in March, 1886, he attained the rank of Lieutenant-Colonel, and was selected for the onerous and responsible post of Chief Paymaster in Ireland. He was not, however, destined long to hold this office, as in August last he was suddenly struck down by the rupture of a blood-vessel in the lungs, and after a painful illness of ten weeks he died on October 18th, 1886, at Dalkey, near Dublin, at the age of forty-eight years. He is interred at Malvern, Worcestershire, by the side of his only son, who died in the previous year, aged fifteen.

Colonel Thorburn's taste for coins was developed while still at school, a friend having presented him with some Scottish coins that had long been treasured in his family. During the whole of his military career he never lost sight of his favourite study, and his collection, acquired by degrees, comprised a considerable number of scarce coins and was especially rich in those of the Stuart period. Numerous references to coins in the Thorburn collection will be found in Kenyon's *Gold Coins of England*. The work by which Colonel Thorburn is best known is a *Guide to the Coins of Great Britain and Ireland*—with their value—published in 1884, of which a short notice appeared in the *Numismatic Chronicle*. On this work he bestowed the leisure hours of some years and I believe that he was contemplating another and a larger work when his active and useful career was cut short by an untimely death.

Mr. William Brice had long been known as a most diligent

and judicious collector of coins. So long ago as January, 1850, he became a member of this Society, but he shortly afterwards resigned, and did not rejoin our body until February, 1886. His family has for many years been settled in Bristol, in which city Mr. Brice long practised as a solicitor, and of which for a few years he was the Town Clerk. Shortly after his retirement from active work in 1880, his long legal services were fittingly acknowledged by his being placed on the roll of magistrates for the county of Gloucester. Although so skilled a numismatist, he did not write upon the subject of coins, though he was ever ready to help others with information; and Mr. Montagu, when writing on the copper coinage of Great Britain, based many observations on the coins in Mr. Brice's collection, which,—I am divulging no secret in saying it,—have now passed into his own. Mr. Brice was never married, and died after a very short illness on March 14th last, having nearly completed his seventy-fifth year.

The Baron Lucien de Hirsch de Gereuth,³ of Paris, was born at Brussels in 1856, and became a member of this Society in April, 1884, having in November, 1883, communicated to us an important paper⁴ on some rare and inedited Sicilian coins from his own collection. His numismatic tastes dated from a visit to Constantinople in 1869, where he was much struck by the Prokesch-Osten collection. A few years afterwards he began to collect on his own account, and his series of Greek coins, which though limited in extent was of great beauty, comprising some of the finest works of art of the ancient die engravers, was exhibited in the Trocadéro in Paris in 1878.⁵ The coins of Sicily formed the chief part of his collection, and on these he could speak with authority. A posthumous memoir by the Baron L. de Hirsch on the coins of Orontobates or Rhoonto-

³ A more extended memoir will be found in the *Rev. Num.* 1887, p. 195.

⁴ *Numismatic Chronicle*, 3rd Series, vol. iii., p. 165.

⁵ *Ann de Num.*, vol. v., p. 204.

pates has just appeared in the *Revue Numismatique*, 1887, p. 89.

Mr. James Gibbs, who for some years was a member of the Council of the Supreme Government of India, joined this Society in May, 1880, and communicated several papers to our Journal. The first of these was on the Gold and Silver Coins of the Bahman Dynasty which ruled over the Deccan for a term of a century and a half, but of whose history and coinage but little had previously been published. A second important paper on some rare and unpublished coins of the Pathan and Mogul Dynasties of Delhi was published in 1885, and forms a necessary supplement to the works of Marsden and Thomas. Sir Walter Elliot, another distinguished Oriental numismatist and author of the work *On the Coins of Southern India* in the International Marsden, has also passed away. He was, however, I believe, at no time a member of this Society.

Among the more important numismatic works published in this country during the past year I must place first the *Historia Numorum*, by our excellent Secretary, Mr. Head, which has been issued by the Oxford University Press. It is rightly described on its title page as a Manual of Greek Numismatics, and I think that it may fairly claim for itself the distinction of being the most complete manual of the kind that has hitherto appeared in any language. Numismatic science like all other sciences is cumulative, and in addition to being able to benefit by the studies of our predecessors, and as it were to stand on their shoulders when searching after knowledge, we of the present day have the advantage of more widely spread general knowledge of archæological subjects and of more scientific methods for their investigation. On the metric systems of antiquity, on their extension and diffusion from various centres, on the chronological classification of coins by means of their style, and indeed on most subjects connected with Greek numismatics, Mr. Head has long been able to speak with the authority of mature experience. It is I think sixty years since

the complete publication of the *Doctrina Numorum Veterum* of Eckhel, and nearly ninety since his death, and the *Historia Numorum* of Mr. Head is the only comprehensive work of the same kind which has since been given to the world. A comparison of the two works will show how enormously our knowledge, at all events in some departments, has extended in this interval of time. For instance, as I have already observed, not a single Cyzicene was known to Eckhel, and of the coinage of Elis, Corinth, Phocæa, and Attica his knowledge was incomplete and his attributions not unfrequently erroneous, while the Lycian and Cypriote characters, towards the interpretation of which so much has now been accomplished, were practically unknown to him. None of us are infallible, and probably some few corrections will eventually be made in Mr. Head's chronology of the coinages and possibly in their attribution; but as a whole I venture to predict that his manual will long remain the standard work on the Greek coinage, and in the name of the Society I beg to offer him our congratulations on the completion of his arduous task, and our thanks for the assistance he has rendered to our science.

Professor Percy Gardner has during the past year added another volume to the valuable series of Catalogues of Greek Coins in the British Museum. It relates to the coins of Peloponnesus, excluding those of Corinth, which will appear in a subsequent volume, and in addition to the mere catalogue contains an important preliminary essay on the monetary standards in Peloponnesus, as well as on the types, chronology, and origin of the coinage in the various states comprised in that peninsula.

Students of English numismatics will gladly hail the first volume of the *Catalogue of English Coins* in the British Museum, which relates to the earlier portion of the Anglo-Saxon Series and has been carefully compiled by Mr. Keary. To this volume also an excellent introductory chapter has been appended, and autotype plates are given of all the principal coins. As might

naturally be expected, our national collection is strong in the coins of this series. There are, however, gaps to which the publication of this catalogue will call attention, and which I hope may in consequence be sooner or later filled. Unfortunately the great growth which has taken place in the number of those who take an intelligent interest in numismatic and archaeological inquiries, has been met by the Government, or perhaps I should say by the Treasury, with a diminution in the annual grant to the British Museum, perhaps the most important educational establishment in the kingdom, to the extent of £10,000, or practically one-half of the funds available for purchases. While spending millions on education, such a curtailment seems in the highest degree ill-timed and irrational, and I hope that the public voice will be raised against a measure of small economy so manifestly misplaced.

It is, however, time to conclude this somewhat lengthy address, and in doing so I will again thank the Society for the great honour which it has conferred upon me, and express my most ardent hopes that the next fifty years of the Society's existence may be at least as useful and as prosperous as those which have now elapsed.

The Meeting then proceeded to ballot for the Officers of the ensuing year, when the following gentlemen were elected :—

President.

JOHN EVANS, ESQ., D.C.L., LL.D., F.R.S., P.S.A.,
F.G.S.

Vice-Presidents.

H. MONTAGU, ESQ., F.S.A.
R. STUART POOLE, ESQ., LL.D

Treasurer.

ALFRED E. COPP, ESQ., M.R.A.S.

Secretaries.

HERBERT A. GRUEBER, Esq., F.S.A.

BARCLAY VINCENT HEAD, Esq., D.C.L., Ph.D.

Foreign Secretary.

PROFESSOR PERCY GARDNER, Litt.D., F.S.A.

Librarian.

OLIVER CODRINGTON, Esq., M.D.

Members of the Council.

JOSEPH BROWN, Esq., Q.C.

MAJOR-GEN. SIR ALEXANDER A. CUNNINGHAM, R.E., K.C.I.E.,
C.S.I.

ARTHUR J. EVANS, Esq., M.A., F.S.A.

THE REV. CANON GREENWELL, D.C.L., F.R.S., F.S.A.

J. G. HALL, Esq.

R. A. HOBLYN, Esq.

F. W. PIXLEY, Esq.

HERMANN WEBER, Esq., M.D.

ERNEST H. WILLETT, Esq., F.S.A.

WARWICK W. WROTH, Esq.

LIST OF MEMBERS
OF THE
NUMISMATIC SOCIETY
OF LONDON.

DECEMBER, 1887.



LIST OF MEMBERS
OF THE
NUMISMATIC SOCIETY
OF LONDON,
DECEMBER, 1887.

*An Asterisk prefixed to a name indicates that the Member has compounded
for his annual contribution.*

*ALEXÉIEFF, M. GEORGE DE, Chambellan de S.M. l'Empereur de
Russie, Ekaterinoslaw (par Moscou), Russie Méridionale.

ANDRÉ, J. H., Esq., 127, New Bond Street, W.

ANDREW, W. J., Esq., Moss Side, Ashton-under-Lyne.

ANDREWS, R. THORNTON, Esq., Castle Street, Hertford.

ARNOLD, W. T., Esq., Guardian Office, Manchester.

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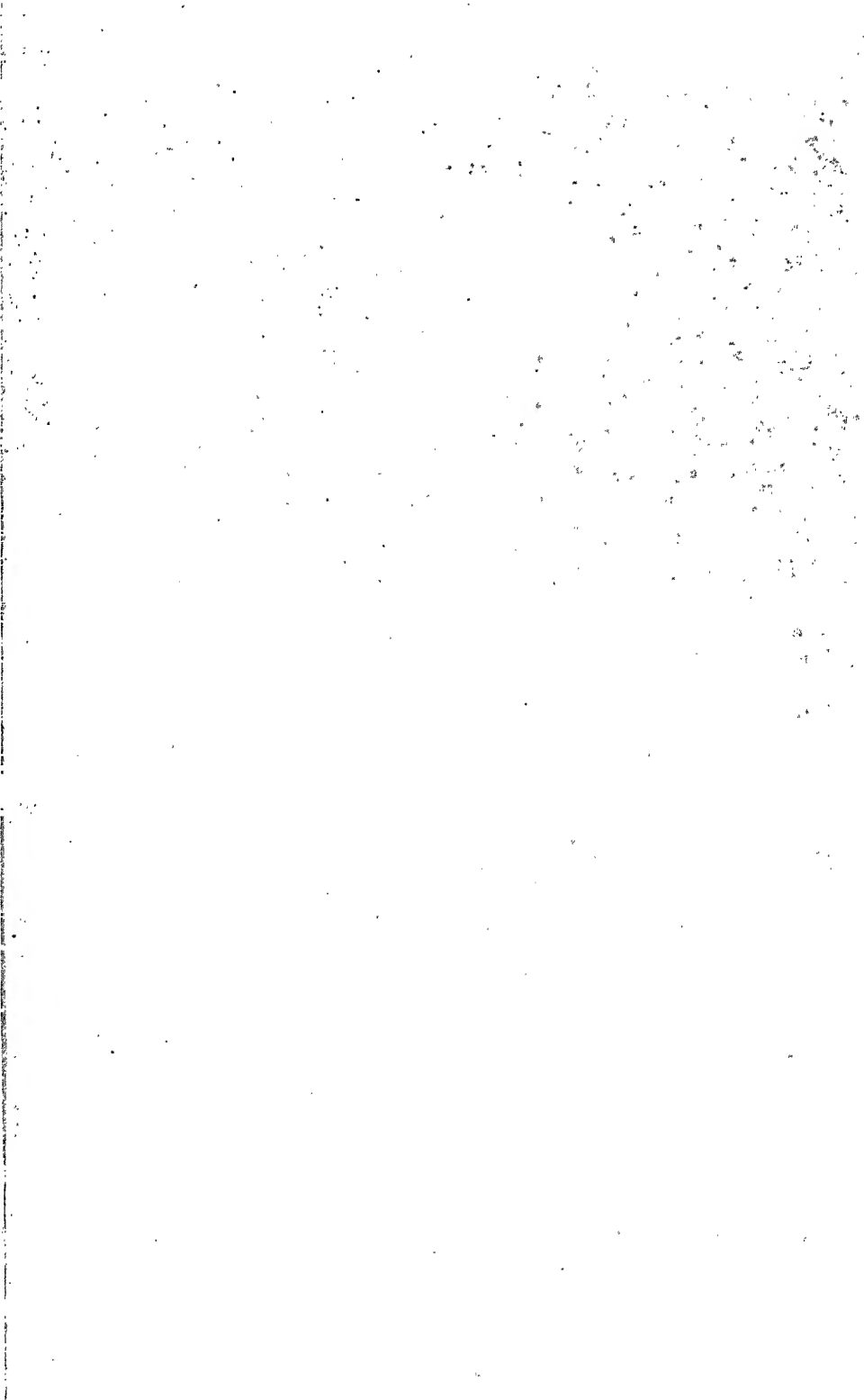
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